Run

```
Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                             Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0% Maximum Match 100%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ^{H}\mathtt{Ctil} number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OM nucleic - nucleic search, using sw model
        8
9
110
111
113
114
115
116
117
117
118
118
119
120
121
123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB
DB
                                                                                              50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                seq
      50
50
50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                      Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pending_Patents_NA_New:*

1: /cgn2_6/ptodata/1/pna/PCT_NEW_COMB.seq:*

2: /cgn2_6/ptodata/1/pna/US06_NEW_COMB.seq:*

3: /cgn2_6/ptodata/1/pna/US07_NEW_COMB.seq:*

4: /cgn2_6/ptodata/1/pna/US08_NEW_COMB.seq:*

5: /cgn2_6/ptodata/1/pna/US09_NEW_COMB.seq:*

6: /cgn2_6/ptodata/1/pna/US09_NEW_COMB.seq:*

7: /cgn2_6/ptodata/1/pna/US09_NEW_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-072-994A-13
1019
1 ATGAAGTTGTCAGATTATTA.....TTACAATTAATGTTGGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            May 29, 2002, 09:57:51; Search time 155.44 Seconds (without alignments) 6770.074 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Listing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        822886 seqs, 516359360 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IDENTITY_NUC
      GenCore version
Copyright (c) 1993 - 2000
      first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                          DΒ
     \verb"OOU" \end{substitute}
 US-10-105-299-12506
US-10-103-295-385
US-10-103-295-385
US-10-103-295-385
US-10-103-295-385
US-10-027-632-113786
US-10-027-632-113786
US-10-027-632-113786
US-10-027-632-113786
US-10-027-632-113786
US-10-103-295-384
PCT-US02-06415-9
US-10-136-734-26
US-10-136-734-26
US-10-136-734-26
US-10-136-734-26
US-10-136-734-26
US-10-136-734-26
US-10-136-734-26
US-10-136-734-26
US-10-027-632-128109
US-10-027-632-128109
US-10-027-632-975-33
PCT-US02-06415-42
US-10-027-632-975-33
PCT-US02-06415-9
US-10-027-632-975-33
US-10-027-632-975-33
US-10-027-632-975-33
US-10-027-632-975-33
US-10-027-632-975-33
US-10-027-632-975-33
US-10-027-632-975-33
US-10-027-632-975-33
US-10-027-632-975-33
                                                                                                                                                                                                                                                                                                                                                                                                                          IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.5
Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1645772
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                 Sequence
Sequence
                                                                                                                                                                                                                                Sequence
Sequence
                                                                                                                                                                                                                                                                              Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                           Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                          Sequence
Sequence
                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                        Sequence
 384, App
60, Appl
97533, A
42, Appl
97533, Appl
197533, Ap
1995, Ap
32696, A
                                                                                                                      12506, A

185, App

12506, A

385, App

113786,

113788,

113788,

113787,

113787,

113788,

113787,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

1137888,

113788,

113788,

113788,

113788,

113788,

113788,

1137888,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

113788,

1137888,

113788,

113788,

113788,

113788,

113788,

113788,

1137888,

113788,

113788,

113788,

113788,

113788,

113788,

1137888,

113788,

113788,

113788,

113788,

113788,

113788,

1137888,

113788,

113788,

113788,

113788,

113788,

113788,

1137888,

113788,

113788,

113788,

113788,

113788,

113788,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

1137888,

11378888,

11378888,

1137888,

1137888,

113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1019
                                                                         δõ
                                            밁
                                                                                                        В
                                                                                                                                 QΥ
                                                                                                                                                                   В
                                                                                                                                                                                              QУ
                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                           р
                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                        Db
                                                                                                                                                                                                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1
US-10-105-299-12506/c
                                                                                                                                                                                                                                7576
                                                                                                                                                                                                                                                                                             7636
                                                                                                                                      347
```

	O	c	c	O			O	O	O	O			O	C		o	O	O
45	44	43	42	41	40	39	38	37	36	S	34	w	32	31	30	29	28	27
47.6	47.6	47.6	47.6	47.6	47.8	47.8	47.8	48.4	48.4	48.4	48.8	49.2	49.4	49.4	50	50	50	50
4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.8	4.8	4.8	4.8	4.9	4.9	4.9-	4.9
3233	628	534	534	534	858	695	628	628	628	529	843	1127	755	375	46843	14809	14809	14809
σ	თ	σ	6	δ	σ	6	σ	6	6	σı	o	6	σ	ഗ	6	σ	Ľ	1
US-09-919-002-2106	US-10-027-632-113152	US-10-027-632-242386	US-10-027-632-242385	US-10-027-632-242384	US-10-027-632-154234	US-10-027-632-27031	US-10-027-632-271551	US-10-027-632-233403	US-10-027-632-233402	US-09-789-189-835	US-10-027-632-7034	US-10-027-632-119520	US-10-027-632-128109	US-09-789-189-1457	US-10-105-299-13935	US-10-105-299-6325	PCT-US02-09370-950	PCT-US02-09188-914
				Sequence 242384,					23340	Sequence 835, App	Sequence 7034, Ap		Sequence 128109,	Sequence 1457, Ap			950,	Sequence 914, App

ALIGNMENTS

Sequence 12506, Application US/10105299
; Sequence 12506, Application US/10105299
; GENERAL INFORMATION:
; APPLICANT: Rosen, et. al
; TITLE OF INVENTION: Human Secreted Proteins
; FILE REFERENCE: PS950
; CURRENT APPLICATION NUMBER: US/10/105,299
; CURRENT FILING DATE: 2002-03-26
; NUMBER OF SEO ID NOS: 15197
; Prior Application removed - See File Wrapper (
SOFTWARE: Patentin Ver. 2.0
; SEO ID NO 12506
; LENGTH: 13859
; ORGANISM: Homo Sapiens
US-10-105-299-12506 Query Match 8.0%; Best Local Similarity 44.9%; Matches 349; Conservative 7696 ATATAATATAATCATAAAAAAAATGTAATACCACATAATATAATTATATTTTATTAC 467 GTAATATTTTCTTTGCCCGGGATGATATAACACCAACCGATTATTGGAGATTTTGATATTT 526 287 CAAAATATTGTAAACGAACAACACGATTTATTTATGGTATTAATGGTAATCTTGTTAGTA 346 167 TTAAAACTTTGAAACCACCACCACCATCCAAACATAATTGAATATTTTAATGATCTTAAAATTTATG 107 AAATAGTTGATGAAGATTTCAGTCTTCCACCACATTCAATCCATCGAGAAATTTTTATAC TAAAATATAATGTAAAATATATAAAATACATAAAAGATAAATTATAAAAAAACAAAATATA ATCAATATACACTTGCTAATGAAATTGAAGAAAAGATATCAAATTATGGTTAAAATCAA 406 GTTACATATATATATATATATATATATATATATATACATGTTTATACATATAAAATATAATCA ATTAGAATTTTATAATATAACATAATACTATATAACATTCTTATATATATATATATAT TGAGTTCAGGACTTGAATTTATTCATTCACAAGGGATAATTCATCGTGATATAAAACCCA See File Wrapper or Score 81.8; DB 6; pred. No. 7.4e-05; 0; Mismatches 427; Score 81.8; Pred. No. 7. Palm Length 13859; Indels 1. Gaps 7457 7517 7577 7637 466 166

1:

000 0

o o

0000

000

Ġ.

Ωy В

GTTATGATTTAAAACTGCCACCTAAAGATGAACCCCCCTATGGCGAAATATAT-TGATGTA 585

```
20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
  망
                                                                                                             QΥ
                                                                                                                                                                                                                                                       ; TYPE: DNA; ORGANISM: Homo sapiens US-10-103-295-385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-103-295-385
                                Qy
                                                                          Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 385, Application US/10103295 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 385
                                                                                                                                                         Matches
                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: PCT/US99/15849
PRIOR FILING DATE: 1999-07-14
PRIOR APPLICATION NUMBER: 60/092,921
PRIOR FILING DATE: 1998-07-15
PRIOR APPLICATION NUMBER: 60/092,922
PRIOR FILING DATE: 1998-07-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT FILING DATE: 2002-03-22
PRIOR APPLICATION NUMBER: PCT/US01/29871
PRIOR FILING DATE: 2001-09-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Ruben et al.
TITLE OF INVENTION: 71 Human Secreted Proteins
FILE REFERENCE: PZ030P2
                                                                                                                                                                                                                                                                                                                                                      SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: 09/482,273
PRIOR FILING DATE: 2000-01-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2001-01-12 PRIOR APPLICATION NUMBER: 60/234,925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: PCT/US01/00911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/10/103, 295
                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/092,956
                                                                                                                                                                                                                                                                                                               LENGTH: 20420
  4142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6976 ACATTTATTATATATAAATATATAAAATATAAAATATATACATCAATATACAATAA 6920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  142 TCAATCCATCGAGAAATTTTTATACTTAAAACTTTGAAACCACATCCAAACATAATTGAA 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    766 TTAAATCAAATATTTGAAAATTTCGGTACACCCAATTTAACTGATTTTGAAGATGAATTA 825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       586 TCTACAGGTATTTATAAAGCACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAA
                                    202 TATTTAATGATCTTAAAATTTATGATGATGTTATATTAGTCACCAAATTGTATCGTTAT 261
                                                                                                                                                     Local Similarity hes 340; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTTTTAGTCAAAGATGATAAAGAATTGACTAATGATTCTCATGTTAGTGATTTATATTTA 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTGATATTTGGTCATTGGGTATAATTTTGACTGGTTTATATTCAGAAAATTTTCAAAGT 705
tatatgaaaaaatatatataaaatatatatatgaaaatatatatatatatatatatgaa 4201
                                                                          TTTTGTGATGAATATAATAATGAAAACTTGCATTTTAAAAAATTCAATTTACAAAAA 882
                                                                                                                                                                                                                                                                                                                                                    PatentIn
                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                            1998-07-15
                                                                                                                                                                          6.8%;
                                                                                                                                                         0;
                                                                                                                                                     Score 69.4; DB 6;
Pred. No. 0.0067;
0; Mismatches 426;
                                                                                                                                                                                              Length 20420;
                                                                                                                                                         Indels
                                                                                                                                                       5;
                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7217
                                                                            4141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7097
                                                                                                                                                       1;
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뭥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ωy
δÃ
                             뫄
                                                       Ω
                                                                                                                                                                                                                                                                                                                                                                                   US-10-105-299-12506
                                                                                                                                                                                                                                                                                                                                                                                                                                             Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вb
                                                                                                                                                               US-10-105-299-12506
                                                                                                                                                                        ; SOFTWARE: PatentIn Ver. ;
SEQ ID NO 12506
; LENGTH: 13859
; TYPE: DNA
; ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                      Sequence 12506, Application US/10105299 GENERAL INFORMATION:
                                                                                     Best Local Similarity 44.4 Matches 416; Conservative
                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/10/105,299
CURRENT FILING DATE: 2002-03-26
NUMBER OF SEQ ID NOS: 15197
Prior Application removed - See File Wrapl
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                          APPLICANT: Rosen, et. al TITLE OF INVENTION: Human Secreted Proteins
                                                                                                                                                                                                                                                                                                              FILE REFERENCE: PS950
                             6350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      442
   133 CCACCACATTCAATCCATCGAGAAATTTTTATACTTAAAACTTTGAAACCACATCCAAAC 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATAATTCATCGTGATATAAAACCCCAGTAATATTTTCTTTGCCCGGGATGATATAACACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tatatatataaatatatatatatgaaaatatatatataaatatatatatatatatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGTATTAATGGTAATCTTGTTAGTAATCAATATACACTTGCTAATGAAATTGAAGAAAAA 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTATAACTAATTATGAATATGAAATTGATATTTGGTCATTGGGTATAATTTTTGACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAATAGTTGATGAAGATTTCAGTCTT 132
                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAAATTCAATTTACAAAAATATCCTAGAAAAGATTGGGATATTATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTCATGTTAGTGATTTATTTATTTAAATCAAATATTTGAAAATTTCGGTACACCCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tatatatgaaaatatatatataaaatatatatatatgaaaatatatatatatatata 4676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTATATTCAGAAAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGAT 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tatataaatatatatatatgaaaatatatatataaatatatatatatgaaaatatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGATTATTGGAGATTTTGATATTTGTTATGATTTAAAACTGCCACCTAAAGATGAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tatatgaaaatatatataaaatatatatatatgaaaatatatatataaaatatatatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -atgaaaatatatataaatatatatataaatatatatatgaaaatatatatatatgaaaata 4316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6.5%;
                                                                                                                                                                                                                                                   See File Wrapper or Palm
                                                                                       0; Mismatches
                                                                                                   Score 66; DB 6;
Pred. No. 0.023;
                                                                                                                   DB 6;
                                                                                       500;
                                                                                                                    Length 13859;
                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                4847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          912
                                                                                       20;
                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4436
                                                                                       Ψ
```

```
RESULT 4
US-10-103-295-385/c
US-10-103-295-385/c
; Sequence 385, Application US/10103295
; GENERAL INFORMATION:
; APPLICANT: Ruben et al.
; TITLE OF INVENTION: 71 Human Secreted Proteins
; FILE REFERENCE: PZ030P2
; FILE REFERENCE: PZ030P2
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                        Qγ
                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                              ₽,
                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                           ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
CURRENT APPLICATION NUMBER: US/10/103,295
CURRENT FILING DATE: 2002-03-22
PRIOR APPLICATION NUMBER: PCT/US01/29871
PRIOR FILING DATE: 2001-09-24
PRIOR APPLICATION NUMBER: PCT/US01/00911
PRIOR FILING DATE: 2001-01-12
                                                                                                                                                                                            7230 attttatgtaatacaatattatattttatataatta
                                                                                                                                                                                                                                                                                                                                                           7050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6649
                                                                                                                                                                                                                           973
                                                                                                                                                                                                                                                               CCTCGATGCAATGATGATTAATGAAAGAAAATTTTTACCAAGATGATTAGATATGATCGA 972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATAACACAACCGATTATTGGAGATTTTGATATTTGTTATGATTTAAAACTGCCACCTAAA 552
                                                                                                                                                                                                                                                 ACTAATGATTCTCATGTTAGTGATTTATATTTAAATCAAATATTTGAAAATTTCGGT 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                              atatttatatatatttata----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGACTGGTTTATATTCAGAAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTG 732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TIGATICITGGTATAACTAATIAIGAATAIGAAATITGATATITGGTCATIGGGTATAATI 672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTATAAAGCACCAGAA 612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCACAAGGGATAATTCATCGTGATATAAAACCCAGTAATATTTTCTTTGCCCGGGATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tacttattatccactgggtaacataatagaatatataatatataaatattatatattaca 6708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTATTTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTTGCTAATGAAATT
                                                                                                                                                                                                                       AGTAAAAGAATAACTTCTAAAGAAATCTTACAATTA 1008
                                                                                                                                                                                                                                                                                                  TTGCATTTTAAAAAATTCAATTTACAAAATATCCTAGAAAAGATTGGGATATTATTTTA 912
                                                                                                                                                                                                                                                                                                                                                       ACACCCAATTTAACTGATTTTGAAGATGAATTATTTTGTGATGAATATAATGAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                          GAAGAAAAAGATATCAAATTATGGTTAAAATCAATGAGTTCAGGACTTGAATTTATTCAT 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             atcatatatacatattatatatgtatatgtatatgtataatgtataatatatgtatatgtgta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATCGTTATGATTTGAGTCAATTGATTGAAATTACAAAATATTGTAAACGAACAACACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATAATTGAATATTTTAATGATCTTAAAATTTATGATGATGTTATATTAGTCACCAAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----tataataaatgtaaataataaatgt 6989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      _
=
=
-
                                                                                                                                                                                               7265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            252
         B
                                 Qy
                                                            Дb
                                                                                  δÃ
                                                                                                              B
                                                                                                                                    Ωy
                                                                                                                                                               DЬ
                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                       Ъ
                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                   δõ
                                                                                                                                                                                                                                                                                                                                                                              DЬ
                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
```

```
; TYPE: DNA; ORGANISM: Homo sapiens US-10-103-295-385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/092,956
PRIOR FILING DATE: 1998-07-15
NUMBER OF SEQ ID NOS: 417
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 385
SEQ ID NO 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 343; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/234,925
PRIOR FILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: 09/482,273
PRIOR EILING DATE: 2000-01-13
PRIOR APPLICATION NUMBER: PCT/US99/15849
PRIOR FILING DATE: 1999-07-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/092,921
PRIOR FILING DATE: 1998-07-15
PRIOR APPLICATION NUMBER: 60/092,922
PRIOR FILING DATE: 1998-07-15
PRIOR FILING DATE: 1998-07-15
                                                                                                                                                                                         4343
                                                                                                                                                                                                                                                                                                                                                                  4643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4883 AAAATATATATATATATATTTATATATATATATATGTTTATATATATATATATTTTATATATTTT 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               138 ACATTCAATCCATCGAGAAATTTTTATACTTAAAACTTTGAAACCACATCCAAACATAAT 197
ATGATTCTCATGTTAGTGATTTATATTTAAATCAAATATTTGAAAATTTCGGTACAC 796
                                             ATATATTTATATATATTTTCATATATATTTTCATATATATATATTTTCATATATATATTTT 4284
                                                                                                                                                                                                                         CTGGTTTATATTCAGAAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTA 736
                                                                                                                                                                                                                                                                       ATATATATATATTATATATATATTTTCATATATATATTTATATATATATTTTCATATAT 4344
                                                                                                                                                                                                                                                                                                                                                                                                       AACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTATAAAGCACCAGAATTGA 616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATATATTTTCATATATATATTATATATATATATTTTCATATATATATATATTTATATAT 4524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGGGATAATTCATCGTGATATAAAACCCAGTAATATTTTCTTTGCCCGGGATGATATAA 496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAAAGATATCAAATTATGGTTAAAATCAATGAGTTCAGGACTTGAATTTATTCATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGAATATITTAATGATCTTAAAATITATGATGATGTTATATTAGTCACCAAATTGTATCG 257
                                                                                                                                                                                                                                                                                                                       TTCTTGGTATAACTAATTATGAATATGAAATTGATATTTGGTCATTGGGTATAATTTTGA 676
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATATTTTCATATATATATTTTATATATATATTTTCATATATATATATATATATATATATATATAT 4464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTAT-GGTATTAATGGTAATCTTGTTAGTAATCAATATACACTTGCTAATGAAATTGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTATGATTTGAGTCAATTGAATTGAAATTACAAAATATTGTAAACGAACAACACGATTTAT 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6.2%;
43.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 63.2; DB Pred. No. 0.064;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches 448;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20420;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
```

556

4644 376

4704

1;

```
Qy
                                                                                        밁
                                                                                                                               Qγ
                                                                                                                                                                            В
                                                                                                                                                                                                                   QΥ
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: DNA
; ORGANISM: Human
US-10-027-632-113786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-027-632-113786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qγ
  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 6.2%;
Best Local Similarity 44.6%;
Matches 379; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 113786
LENGTH: 3252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 113786, Application US/10027632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single TITLE OF INVENTION: Polymorphisms in the Human Genome FILE REFERENCE: 108827.129

CURRENT APPLICATION NUMBER: US/10/027,632

CURRENT FILING DATE: 2002-04-30

PRIOR APPLICATION NUMBER: US 60/218,006

PRIOR APPLICATION NUMBER: US 60/218,006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR FILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR APPLICATION NUMBER: US 60/167,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 60/156,358
PRIOR FILING DATE: 1999-09-28
PRIOR APPLICATION NUMBER: US 60/146,002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 325720
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1999-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1164 aatttaataacatattaaaaagctaatttaatatttacgttaatattaacatctt 1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4103 TACATATATATG 4092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1224 tatacttactgttaacttatattaaatttaattaatatagtaaattaacttattaatatgc 1283
                                                                                                                                                                                514 GATTTTGATATTTGTTATGATTTAAAACTGCCACCTAAAGATGAACCCCCCTATGGCGAAA 573
                                                                                                                                    454 GATATAAAACCCAGTAATATTTTCTTTGCCCGGGATGATATAACACAACCGATTATTGGA 513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       157 ATTITTATACTTAAAACTTTGAAACCACATCCAAACATAATTGAATATTTTAATGATCTT 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               917 GATGCAATGATG 928
                                                                                                                                                                                                                          atattatatatatatatatataatttgcattacattattatataacataataaaatca
                                                                                                                                                                                                                                                                                                                  AATCTTGTTAGTAATCAATATACACTTGCTAATGAAATTGAAGAAAAAGATATCAAATTA 393
                                                                                                                                                                                                                                                                                                                                                                                                        AAAATTTATGATGATGTTATATTA----GTCACCAAATTGTATCGTTATGATTTGAGTCAA 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTITAAAAAATTCAATTTACAAAAATATCCTAGAAAAGATTGGGGATATTATTTTACCTC
agtattcatatattaatattatgaatatattgatataataattatgtatgatacaatcaa 1578
                                                                                          aatataataattcttatatattaatataagaatagcaatat----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 62.8; DB 6; Length 3252;
Pred. No. 0.072;
0; Mismatches 462; Indels 9
                                                                                        -attcatatattaat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        916
                                                                                                                                                                                                                                                                         1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ω
```

δõ

Query Match
Best Local Similarity
Matches 379; Conserv

Conservative

0;

Score 62.8; DB 6; Pred. No. 0.072; 0; Mismatches 462;

Length 3252; Indels

9;

Gaps

ω

6.2%;

```
APPLICANT: Wang, David G.
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
FILE REFERENCE: 108827.129
CURRENT APPLICATION NUMBER: US/10/027,632
CURRENT FILING DATE: 2002-04-30
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR FILLING DATE: 2000-07-12
PRIOR FILLING DATE: 2000-04-20
PRIOR FILING DATE: 2000-04-20
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR FILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR APPLICATION NUMBER: US 60/185,363
PRIOR FILING DATE: 2000-02-24
PRIOR FILING DATE: 2000-02-24
PRIOR FILING DATE: 1999-11-23
PRIOR FILING DATE: 1999-11-23
PRIOR APPLICATION NUMBER: US 60/156,358
PRIOR FILING DATE: 1999-09-28
PRIOR FILING DATE: 1999-09-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
; TYPE: DNA
; ORGANISM: Human
US-10-027-632-113787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-027-632-113787; Sequence 113787, App; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                              SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 113787
LENGTH: 3252
                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 60/146,002 PRIOR FILING DATE: 1999-08-09
                                                                                                                                              NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1999 ataatagtta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       574 TATATTGATGTATCTACAGGTATTTATAAAGCACCAGAATTGATTCTTGGTATAACTAAT 633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     993 AGAAATCTTA 1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTACAAAATATCCTAGAAAAGATTGGGATATTATTTTACCTCGATGCAATGATGATTT 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGAAGATGAATTATTTTGTGAATGAATAATAATGAAAACTTGCATTTTAAAAAAATCAA 872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAATTTTCAAAGTGTTTAGTCAAAGATGATAAAGAATTGACTAATGATTCTCATGTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGATTTATATTTAATTAAATCAAATATTTGAAAATTTCGGTACACCCAATTTAACTGATTT 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATGAATATGAAATTGATATTTGGTCATTGGGTATAAT-TTTGACTGGTTTATATTCAGA 692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tatatataatatatcatgtattatttatatttatatattttaatattttaatatggttaactatat 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATGAAAGAAATTTTTACCAAGATGATTAGATATGATCGAAGTAAAAGAATAACTTCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/10027632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1938
```

```
RESULT 7
US-10-027-632-113788
US-10-027-632-113788
Sequence 113788, Application US/10027632
GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Description and Mappi
TITLE OF INVENTION: Polymorphisms in the Hu
FILE REFERENCE: 108827.129
CURRENT APPLICATION NUMBER: US/10/027,632
CURRENT FILING DATE: 2002-04-30
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR APPLICATION NUMBER: US 60/198,676
PRIOR FILING DATE: 2000-04-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                              QY
                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                  ŶĎ
                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         • 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tatacttactgttaacttatattaaattaattaatatgtaaattaacttattaatatgc 1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aatataataattottatatattaatataagaatagcaatat----attcatatattaat 1518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATATAAAACCCAGTAATATTTTCTTTGCCCGGGATGATATAACACAACCGATTATTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATCTTGTTAGTAATCAATATACACTTGCTAATGAAATTGAAGAAAAGATATCAAATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      agtattcatattaatattatgaatatattgatataataattatgtatgatacaatcaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATTTTGATATTTGTTATGATTTAAAACTGCCACCTAAAGATGAACCCCCTATGGCGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atattatatatatatatatatattgcattacattattatataacataataaatca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aatttaataataacatattaaaaaagctaatttaatatattacgttaatattaacaatctt
                                                                                                                                                                                                                                                                                 ataatagtta
                                                                                                                                                                                                                                                                                                                  AGAAATCTTA 1002
                                                                                                                                                                                                                                                                                                                                                                                    AATGAAAGAAATTTTTACCAAGATGATTAGATATGATCGAAGTAAAAGAATAACTTCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACAAAATATCCTAGAAAAGATTGGGATATTATTTTACCTCGATGCAATGATGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGAAGATGAATTATTTTGTGATGAATATAATAATGAAAACTTGCATTTTAAAAAATTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGATTTATATTTATTAAATCAAATATTTGAAAATTTCGGTACACCCAATTTAACTGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGATTCTCATGTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atataatataaatattgtatattaaatatatataatatataaatattgtatattaaat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATGAATATGAAATTGATATTTGGTCATTGGGTATAAT-TTTGACTGGTTTATATTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATATTGATGTATCTACAGGTATTTATAAAGCACCAGAATTGATTCTTGGTATAACTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAATTTATGATGATGTTATATTA---GTCACCAAATTGTATCGTTATGATTTGAGTCAA
                                                                                                                                                                                                                                                                                                                                                     tatatataatatatcatgtattatttatatatttatatattttaatatttaatatgtttaactatat 1998
                                                                                                                             and Mapping of Single Nucleotide in the Human Genome
                                                                                                                                                                                                                                                                                                                                                                                       992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1638
                                                                                                                                                                                                                                                                                                                                                                                                                      1938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            513
                                                                                                                                                                                                                                                                                                                                                                                                                                                         932
```

```
; ORGANISM: Human US-10-027-632-113788
                                                                                  Qy
                                                                                                                          Вþ
                                                                                                                                                           Q
                                                                                                                                                                                                 망
                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                      뫄
                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                            ρy
                                                                                                                                                                                                                                                                                                                                                                                                                     뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                 δõ
                                                     Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; PRIOR APPLICATION NUMBER: US 60/193,483
; PRIOR FILING DATE: 2000-03-29
; PRIOR APPLICATION NUMBER: US 60/185,218
; PRIOR FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: US 60/167,363
; PRIOR FILING DATE: 1999-11-23
; PRIOR APPLICATION NUMBER: US 60/156,358
; PRIOR APPLICATION NUMBER: US 60/156,358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 379; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 325720
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 113788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 60/146,002 PRIOR FILING DATE: 1999-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 3252
                                                                                                                                                                                                                                                                                                                                               1579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tatacttactgttaacttatattaaattaattaatatagtaaattaacttattaatatgc 128:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAATTTATGATGATGTTATATTA----GTCACCAAATTGTATCGTTATGATTTGAGTCAA 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aatttaataataacatattaaaaagctaatttaatattacgttaatattaacaatctt 1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTTTTATACTTAAAACTTTGAAACCACATCCAAACATAATTGAATATTTTAATGATCTT 216
                                                                                                                                                                                                                                                                                                                                                                                                               agtattcatattaatattatgaatatattgatataataattatgtatgatacaatcaa 1578
                                                                                                                                                                                                                                                                                                                                                                                                                                        GATTTTGATATTTGTTATGATTTAAAACTTGCCACCTAAAGATGAACCCCCCTATGGCGAAA 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aatataataattottatatattaatataagaatagcaatat----attcatatattaat 1518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATATAAAACCCAGTAATATTTTCTTTGCCCGGGATGATATAACACAACCGATTATTGGA 513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atattatataatatattatatatatttgcattacattattatataacataataaaatca 1403
                                                                                                                                                                                               TATGAATATGAAATTGATATTTGGGCATTGGGTATAAT-TTTGACTGGTTTATATTCAGA 692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATCTTGTTAGTAATCAATATACACTTGCTAATGAAATTGAAGAAAAAGATATCAAATTA 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTACAAAAATATCCTAGAAAAGATTGGGATATTATTTTACCTCGATGCAATGATGTTT
                                                     TGAAGATGAATTATTTTGTGATGAATATAATAATGAAAACTTGCATTTTAAAAAATTCAA
                                                                                                                            TGATTTATATTTAAATCAAATATTTGAAAATTTCGGTACACCCAATTTAACTGATTT 812
                                                                                                                                                                                                                                    ANATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGATTCTCATGTTAG
                                                                                                                                                                                                                                                                                                                                              TATATTGATGTATCTACAGGTATTTATAAAGCACCAGAATTGATTCTTGGTATAACTAAT 633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches 462;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 62.8; DB 6; Pred. No. 0.072;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 3252;
```

752

Gaps

```
RESULT
US-09-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                               멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: DNA; ORGANISM: Homo sapiens US-09-789-189-1779
                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                      δõ
                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                       δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                     US-10-027-632-113786/c
                                                                                                                                                                                                                                                         뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1779, Application US/09789189
Sequence 1779, Application US/09789189
GENERAL INFORMATION:
APPLICANT: Lelias, Jean-Michel
TITLE OF INVENTION: Human Polynucleotides
FILE REFERENCE: 25436/1720
CURRENT APPLICATION NUMBER: US/09/789,189
CURRENT FILING DATE: 2001-02-20
CURRENT FILING DATE: 2001-02-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/183452
PRIOR FILING DATE: 2000-02-18
NUMBER OF SEQ ID NOS: 2005
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1779
LENGTH: 375
          Sequence 113786, Application US/10027632

Sequence 113786, Application US/10027632

GENERAL INFORMATION:

APPLICANT: Wang, David G.

APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single TITLE OF INVENTION: Polymorphisms in the Human Genome FILE REFERENCE: 108827.129

CURRENT FILING DATE: 2002-04-30

PRIOR APPLICATION NUMBER: US/10/027,632

CURRENT FILING DATE: 2002-04-30

PRIOR FILING DATE: 2000-07-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 166; Conserv
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    571 AAATATATTGATGTATCTACAGGTATTTATAAAGCACCAGAATTGATTCTTGGTATAACT 630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 631 AATTATGAATATGAAATTGATATTTGGTCATTGGGTATAATTTTGACTGGTTTATATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     871 AATTTACAAAAATATCCTAGAAAAGATTGGGATATTATTTTA 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   296 TATTTGGAAGAATAAGGTAATTGTTATTTTTAGAAATGTGATTTTAATATGTAAAATAT
 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                             TTTGAAGATTATTTTTGTGATGAATATAATGAAAACTTGCATTTTAAAAAATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ataatagtta 2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATGAAAGAATTTTTTACCAAGATGATTAGATATGATCGAAGTAAAAGAATAACTTCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGATTCTCATGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAAATCTTA 1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tatatataatatatcatgtattattatatatttatatattttaatatttaatatggttaactatat 1998
                                                                                                                                                                                                                                                         ATGATATTTTGAAAATGAAGAGTAAAGTATTTTTAATGATA 15
                                                                                                                                                                                                                                                                                                                            AGTGATTTATATTAATCAAATATTTGAAAATTTCGGTACACCCAATTTAACTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    48.5%;
SD
 60/198,676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 60.4; DB 5; Pred. No. 0.17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches 176;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 375;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                      Nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1938
                                                                                                                                                                                                                                                                                                                                                                 870
                                                                                                                                                                                                                                                                                                                                                                                                                                    810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       297
                                                                                                                                                                                                                                                                                                                               57
                                                                                                                                                                                                                                                                                                                                                                                                   117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
```

```
QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Human US-10-027-632-113786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 2000-04-20
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR FILING DATE: 2000-03-29
PRIOR PELLOATION NUMBER: US 60/185,218
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR APPLICATION NUMBER: US 60/156,358
PRIOR APPLICATION NUMBER: US 60/156,358
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR FILING DATE: 1999-08-09
PRIOR FILING DATE: 1999-08-09
NUMBER OF SEQ ID NOS: 325720
                                                                                                                                          QY
                                                                                                                                                                                Ъ
                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                         Вp
                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                  QУ
                                                                                                                                                                                                                                                                                                                                                                                                       DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Db
δÃ
                                                                   δÃ
                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 113786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 446;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 3252
                                                                                                                                                                                                                                                                                                                                  2157
                                                                                                                                                                                                                                                                                                                                                                                                           2215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2449
                                                                                                                                                                                  2046
                                                                                                                                                                                                                                                           2103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2567 TTATATACTTATATATACTTAAIGTAAGTATATATACTTATTTTAAAGTATACATTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                190
                                                                                                                                                                                                                                                                                                                                                                      429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    309
                                                                                                                                                                                                                                                                                             489
729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACTTATGACTAATATTTTAAAACTTTTAATATATGAAATTAATATATAGTTTATAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTCCACCACATCAATCCATCGAGAAATTTTTATACTTAAAACTTTGAAACCACATCCA 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TATATTAATAAGTATATT--TTAATAACTATGCATTAAAGTTATTGAATAAGTATACATT 2450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TT-GTATCGTTATGATTTGAGTCAATTGATTGAAATTACAAAATATTGTAAACGAACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AACATAATTGAATATTTTAATGATCTTAAAATTTATGATGATGTTATATTAGTCACCAAA 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAATAGTTGATGAAGATTTCAGT 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATGTTTATACTGTAATATATTTAACTGTGTATGGTAACATATGAATAAGTTAATAT 2216
                                    TAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTATAAAGCACC
                                                                                                                                                                                                                                                       TAATTTAATATATACATTAATACTAA - - - TAATCTTATACTTATTGTTAACTTACATT
                                                                                                                                                                                                                                                                                        TGATATAACACAACCGATTATTGGAGATTTTGATATTTGTTATGATTTAAAAACTGCCACC 548
                                                                                                                                                                                                                                                                                                                                  TAATTCATATTATATATTA -----ATATATAATACCATAATAACTTATATTAAAAAGC
                                                                                                                                                                                                                                                                                                                                                                 TCATTCACAAGGGATAATTCATCGTGATATAAAACCCAGTAATATTTTCTTTGCCCGGGA 488
                                                                                                                                                                                                                                                                                                                                                                                                         ATTAAATTTAATATATAATACATTATAATATAAATTTATAACAATATATCATAA--TACA
                                                                                                                                                                                                                                                                                                                                                                                                                              AATTGAAGAAAAGATATCAAATTATGGTTAAAATCAATGAGTTCAGGACTTGAATTTAT 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACGATTTATTTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTTGCTAATGA 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTAAAATATTAAAGTTATAAATTAATACTAACAATTTTTATACTTATATTAATGAGTTTA 2276
ATTGACTAATGATTCTCATGTTAGTGATTTATATTTAAATCAAATATTTGAAAATTT
                                                                     AATTTTGACTGGTTTATATTCAGAAAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGA
                                                                                                           AGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTGGTCATTGGGTAT
                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.9%;
46.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 60.4; DB 6;
Pred. No. 0.17;
0; Mismatches 491;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 3252;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2508
                                          1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       69
                                                                                                                 1927
                                                                                                                                                                                        1987
                                                                                                                                                                                                                                                               2047
                                                                                                                                                                                                                                                                                                                                      2104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             308
                                                                            728
                                                                                                                                                   899
                                                                                                                                                                                                                          809
```

7;

```
GENERAL INFORMATION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Polymorphisms in the Human Genome
FILE REFERENCE: 108827.129
CURRENT EPLICATION NUMBER: US/10/027,632
CURRENT FILING DATE: 2002-04-30
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR FILING DATE: 2000-07-12
PRIOR APPLICATION NUMBER: US 60/198,676
PRIOR APPLICATION NUMBER: US 60/198,676
PRIOR APPLICATION NUMBER: US 60/198,676
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR APPLICATION NUMBER: US 60/185,358
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR FILING DATE: 1999-01-28
PRIOR FILING DATE: 1999-01-28
PRIOR FILING DATE: 1999-09-28
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR APPLICATION NUMBER: US 60/167,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 10
US-10-027-632-113787/c
; Sequence 113787, Application US/10027632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                Š
                                                                                    밁
                                                                                                                         Qy
                                                                                                                                                                        В
                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                                                                            Дb
                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Human
US-10-027-632-113787
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 446; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 113787 LENGTH: 3252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: US 60/146,002 PRIOR FILING DATE: 1999-08-09 NUMBER OF SEQ ID NOS: 325720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1866
2335
                                                                                                                                                                          2449 GAAATATATTAAT-----ATATTATAACTTTAACACTTTAAAATTATAATATAAATATA
                                                                                                                                                                                                                                                                                                                                                  2567 TTATATACTTATATATACTTAATGTAAGTATATACTTATTTTAAAGTATACATTAAAG
                                                                                                                                                                                                                                                                                                        70
                                                                                                                                                                                                                                                                                                                                                                          TATATTAATAAGTATATT - - TTAATAACTATGCATTAAAGTTATTGAATAAGTATACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTACCTCGATGCAATGATGTTAATGAAAGAAATTTTTACCAAGATGATTAGATAT 966
TTAAAATATTAAAGTTATAAAATTAATACTAACCAATTTTTATACTTATATTAATGAGTTTA 2276
                                                                                                                              AACATAATTGAATATTTTAATGATCTTAAAAATTTATGATGATGTTATATTAGTCACCAAA 249
                                                                                                                                                                                                                                                                                        GCTATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAATAGTTGATGAAGATTTCAGT 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATATTTATATATATATATATTTAATATACAATATTTATATATATATATATATTAATAT 1630
                                       TT-GTATCGTTATGATTTGAGTCAATTGATTGAAATTACAAAATATTGTAAACGAACAAC
                                                                                                                                                                                                                  CTTCCACCACATTCAATCCATCGAGAAATTTTTATACTTAAAACTTTGAAACCACATCCA 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAACTTGCATTTTAAAAAATTCAATTTACAAAAATATCCTAGAAAAGATTGGGATATTAT 908
                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                    5.9%;
46.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 60.4; DE Pred. No. 0.17;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches 491;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 3252;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                      21;
                                          308
                                                                                    2336
                                                                                                                                                                        2396
                                                                                                                                                                                                                                                              2450
                                                                                                                                                                                                                                                                                                                                                                                            69
                                                                                                                                                                                                                                                                                                                                                  2508
                                                                                                                                                                                                                                                                                                                                                                                                                                      7;
```

```
DЬ
                             Qy
                                                                    DЬ
                                                                                                      δÃ
                                                                                                                                             밁
                                                                                                                                                                           δÃ
                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                                                             1926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           309
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTATAAAGCACC 608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAATTTAATATTACATTAATACTAA---TAATCTTTATACTTATTGTTAACTTACATT 2047
                       TTTACCTCGATGCAATGATGATTAATGAAAGAAATTTTTTACCAAGATGATTAGATAT 966
                                                                                                                                                                   AGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTGGTCATTGGGTAT 668
                                                                                                                                                                                                                                                                                                                                                                                                                                        AAATTAATTAATATTAAATTAACTTATTAATCTGGTTAACTATTATATAGTTAACC 1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCATTCACAAGGGATAATTCATCGTGATATAAAACCCAGTAATATTTTCTTTGCCCGGGA 488
ATTGACTAATGATTCTCATGTTAGTGATTTATATTTATTAAATCAAATATTTGAAAATTT 788
                                                                                                                                                                                                                                                                                                                                                                   TGATATAACACCAACCGATTATTGGAGATTTTGATATTTGTTATGATTTAAAAACTGCCACC 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAATTCATATTATATATTTA-----ATATATAATAACCATAATAACTTATATTAAAAAAGC 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTAAATTTAATATATAATACATTATAATAATATAAATTTATAACAATATATCATAA - - TACA 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATATGTTTATACTGTAATATATATTTAACTGTGTATGGTAACATATGAATAAGTTAATAT 2216
                                                                                            AAACTTGCATTTTAAAAAATTCAATTTACAAAAATATCCTAGAAAAGATTGGGATATTAT 908
                                                                                                                                                                                                                                                                                                                              AATTTTGACTGGTTTATATTCAGAAAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGA 728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATTGAAGAAAAAGATATCAAATTATGGTTAAAATCAATGAGTTCAGGACTTGAATTTAT 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACGATTTATTGTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTTGCTAATGA
```

APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Polymorphisms in the Human Genome
FILE REFERENCE: 108827.129
CURRENT APPLICATION UNMBER: US/10/027,632
CURRENT FILING DATE: 2002-04-30
PRIOR FILING DATE: 2002-04-30
PRIOR PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR FILING DATE: 2000-07-12
PRIOR FILING DATE: 2000-04-20
PRIOR FILING DATE: 2000-04-20
PRIOR FILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR FILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR FILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR APPLICATION NUMBER: US 60/185,363
PRIOR FILING DATE: 1900-02-24
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR APPLICATION NUMBER: US 60/16,358
PRIOR APPLICATION NUMBER: US 60/16,358
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR FILING DATE: 1999-09-28
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR FILING DATE: 1999-08-09
NUMBER OF SEQ ID NOS: 325720
SEQ ID NO 113788
LENGTH: 3252

RESULT 11 US-10-027-632-113788/c

Sequence 113788, Application US/10027632 GENERAL INFORMATION:

```
δ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ď.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: DNA
; ORGANISM: Human
US-10-027-632-113788
                                                                                                                                                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                       δõ
                                                                                                                                                                                                                                                                                                                                                                                                       몽
                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                    밁
                                                                                                                                                                                                QY
                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                               В
밁
                      Š
                                                      밁
                                                                             δõ
                                                                                                            В
                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 446; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2335
                                                                                                                                                                                                                                                                                                                                                                                                                                                               2157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2395 TACTTATGACTAATATTTTTAAAAACTTTTAATATATGAAATTAATATATAGTTTATAACT
                                                                                                                                                                                                                                                                                                                                                 2046
1687 AATATTTATATATATATATATTTAATATATACAATATTTATATATATATATATATATAT 1630
                                                                                                                                                                       TTATATACTTATATACTTAATGTAAGTATATATACTTATTTTAAAGTATACATTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAATATATTAAT-----ATATTATAACTTTAACACTTTAAAAATTATAATATAAATATA 2396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTCCACCACATCAATCCATCGAGAAATTTTTATACTTAAAACTTTGAAACCACATCCA 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTAAAATATTAAAGTTATAAATTAATACTAACAATTTTTATACTTATATTAATGAGTTTA 2276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACATAATTGAATATTTAATGATCTTAAAATTTATGATGATGATGATTATTAGTCACCAAA 249
                                                                                                                                                                                                                               AATTTTGACTGGTTTATATTCAGAAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGA 728
                                                                                                                                                                                                                                                                                                                                              TAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTATAAAGCACC
                                                                                                                                                                                                                                                                                                                                                                                                       TGATATAACACAACCGATTATTGGAGATTTTGGATATTTGTTATGATTTAAAACTGCCACC 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCATTCACAAGGGATAATTCATCGTGATATAAAACCCAGTAATATTTTCTTTGCCCGGGA 488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTAAATTTAATATATAATACATTATAATATATAAATTTATAACAATATATCATAA--TACA 2158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATTGAAGAAAAAGATATCAAATTATGGTTAAAATCAATGAGTTCAGGACTTGAATTTAT 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACGATTTATTTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTTGCTAATGA 368
                                                                                                                                                                                                                                                                                         AGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTGGTCATTGGGTAT 668
                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAATTCATATTATATTTA-----ATATATAATACCATAATAACTTATATTAAAAAGC 2104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATATGTTTATACTGTAATATATATTTAACTGTGTATGGTAACATATGAATAAGTTAATAT 2216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TT-GTATCGTTATGATTTGAGTCAATTGATTGAAATTACAAAATATTGTAAACGAACAAC 308
                         TTTACCTCGATGCAATGATGATTTAATGAAAGAAATTTTTACCAAGATGATTAGATAT
                                                                       AAACTTGCATTTTAAAAAATTCAATTTACAAAAATATCCTAGAAAAGATTGGGATATTAT 908
                                                                                                               ATTGACTAATGATTCTCATGTTAGTGATTTATTATTTAAATCAAATATTTGAAAATTT
                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 60.4; DB 6; Length 3252; Pred. No. 0.17; 0; Mismatches 491; Indels 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   69
                                                                                                                                                                                                                                                                                             1927
                                                                                                                                                                                                                                                                                                                                                     1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7;
```

```
PRIOR APPLICATION NUMBER: 60/092,922
PRIOR FILING DATE: 1998-07-15
PRIOR FILING DATE: 1998-07-15
PRIOR FILING DATE: 1998-07-15
NUMBER OF SEQ ID NOS: 417
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 384
LENGTH: 19965
TYPE: DNA
ORGANISM: Homo sapiens
US-10-103-295-384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 12
US-10-103-295-384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/234,925
PRIOR FILING DATE: 2000-09-25
PRIOR PPLICATION NUMBER: 09/482,273
PRIOR FILING DATE: 2000-01-13
PRIOR APPLICATION NUMBER: PCT/US99/15849
PRIOR APPLICATION NUMBER: 60/092,921
PRIOR APPLICATION NUMBER: 60/092,921
PRIOR FILING DATE: 1998-07-15
PRIOR FILING DATE: 1998-07-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
               Qy
                                                                                               Q
                                                                                                                                             밁
                                                                                                                                                                                 Q
                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                   δõ
                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                           Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 384, Application US/10103295 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Ruben et al.
TITLE OF INVENTION: 71 Human Secreted
FILE REFERENCE: P2030P2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/10/103,295 CURRENT FILING DATE: 2002-03-22 PRIOR APPLICATION NUMBER: PCT/US01/29871 PRIOR FILING DATE: 2001-09-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: PCT/US01/00911 PRIOR FILING DATE: 2001-01-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               111 AGTTGATGAAGATTTCAGTCTTCCACCACATTCAATCCATCGAGAAATTTTTATACTTAA 170
                                                                                                                                                                                                                                                                                                                                                             291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 51 CATTTCTGATATATATACGGCTATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAAT 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Match 5.9%; Local Similarity 44.0%;
                                                                                                                                                                                                                                                                     ATATACACTTGCTAATGAAATTGAAGAAAAAGATATCAAATTATGGTTAAAATCAATGAG 410
                                                                                                                                                                                                                                                                                                                 atatgaaaaaatatatataaatatatatatgaaaatatatatataaatatatatatgaaa
                                                                                                                                                                                                                                                                                                                                                         ATATTGTAAACGAACAACACGATTTATTTATGGTATTAATGGTAATCTTGTTAGTAATCA 350
                                                                                                                                                                                                                                                                                                                                                                                                 aaatatatatgaaaatatatatatgaaaatatatatgaaaatatatatatatataaatatata 4322
                                                                                                                                                                                                                                                                                                                                                                                                                                           AACTTTGAAACCACATCCAAACATAATTGAATATTTTAATGATCTTAAAATTTATGATGA 230
TGATTTAAAACTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTAC
                                                                                                                                                                      TTCAGGACTTGAATTTATTCATTCACAAGGGATAATTCATCGTGATATAAAACCCAGTAA 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atatatataaatatatatgaaaatatatatgaaaatatatataaatatatatga
                                                              atataaatatatatatgaaaatatatatataaaatatatatatatatgaaaatatatatataa
                                                                                                                                           atatatataaatatatatatgaaaatatatatataaaatatatatatatatgaaaatatat 4500
                                                                                                                                                                                                                               TATTTTCTTTGCCCCGGGATGATATAACACAACCGATTATTGGAGATTTTGATATTTGTTA 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches 432;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 59.8; DB 6; Length 19965; Pred. No. 0.22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
```

Gaps

2;

4202

```
Вb
                                                                      Q
                                                                                                      Дb
                                                                                                                                     οy
                                                                                                                                                                   DЪ
                                                                                                                                                                                               Q
                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                        Ωy
                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                              д
                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 9
; LENGTH: 5917
; TYPE: DNA
; ORCANISM: Plasmodium falciparum
PCT-US02-06415-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 13
PCT-US02-06415-9/c
Sequence 9, Application PC/TUS0206415
GENERAL INFORMATION:
APPLICANT: St. Elizabeth's Medical Center, Inc.
TITLE OF INVENTION: Band 3 Antigenic Peptides,
FILE REFERENCE: S1237/7019WO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity Matches 276; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US 06/272,930 PRIOR FILING DATE: 2001-03-02 NUMBER OF SEQ ID NOS: 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: PCT/US02/06415
CURRENT FILING DATE: 2002-03-01
                                                                                                                                                                                                                                                                                                                                                        5915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4621
                                                                                                                                                                    5735
                                                                                                                                                                                                                                                                                            5855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4561
                                                                                                                                                                                                                                 5795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  591
                                                                                                                                                                                                                                                               357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         t 4858
             TTATAAAGCACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAAATT----
                                            CTTTGCCCGGGATGATATAACACAACCGATTATTGGAGATTTTTGATATTTGTTATGATTT
                                                                                                                                                                    ACTTGAATTTATTCATCACAAGGGATAATTCATCGTGATATAAAACCCAGTAATATTTT 476
                                                                                                                                                                                                                               ACTTGCTAATGAAATTGAAGAAAAAGATATCAAATTATGGTTAAAATCAATGAGTTCAGG 416
                                                                                                                                                                                                                                                                                            TAAACGAACAACACGATTTATTATGGTATTAATGGTAATCTTGTTAGTAATCAATATAC
                                                                                                                                                                                                                                                                                                                                                        aaaaatatataaaatatatatataaacatatatatataaatatatatatatatatattttt 4857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCAAATATTTGAAAATTTCGGTACACCCAATTTAACTGATTTTGAAGATGAATTATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTCAAAGATGATAAAGAATTGACTAATGATTCTCATGTTAGTGATTTATATTTATATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tatatgaatatatatatatatgaaaatatatatatgaaaatatatatatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATTTGGTCATTGGGTATAATTTTGACTGGTTTATATTCAGAAAATTTTCAAAGTGTTTT 710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atatatatatatgaaaatatatatataaatatatatatgaaaatatatat---aaatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGTATTTATAAAGCACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              atatatatatatgaaaatatatataaatatatatatgaatatatatatatatatatgaaa
                                                                          AAAACTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     831
                                                                                                                                                                                                                                                                                                                                                                                                                5.6%;
ilarity 44.5%;
Conservative
=
=
=
                                                                                                                                                                                                                                                                                                                                                                                                                Score 56.8; DB Pred. No. 0.64; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches 337;
                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Malaria Polypeptides and Uses Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 5917;
                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                 7;
                --G
                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  650
                                                                                                                                                                    5676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4620
              649
                                                                          596
                                                                                                                                       536
                                                                                                         5616
                                                                                                                                                                                                                                                                                                                                                                                                                 1;
```

```
RESULT 14
US-10-136-734-26/c
; Sequence 26, Application US/10136734
                                                                                                         Qγ
                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                ; NAME/KEY: misc_feature
; LOCATION: (1)...(5563)
; OTHER INFORMATION: N =
US-10-136-734-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δδ
                                Qy
                                                                       뫄
                                                                                                                                                  B
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/136,734
CURRENT FILING DATE: 2002-04-30
PRIOR APPLICATION NUMBER: US/08/871,755
PRIOR FILING DATE: 1997-06-09
PRIOR FILING DATE: 1997-06-09
NUMBER OF SEQ ID NOS: 27
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 26
LENGTH: 5563
                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 119; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: TRANSGENIC FISH WITH TITLE OF INVENTION: EXPRESSION FILE REFERENCE: 13027.0001U1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Medical College of Georgia Research Foundation APPLICANT: Lin, Shuo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: Description of Artificial Sequence; OTHER INFORMATION: Synthetic Construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                    2134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5555
                                                                                                                                                                                                                             2194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5315 AACATGAGTATTAATAAGAA 5296
                                                                       2074 TAAATTARGAATCTAAACTTCGATATATAAATACTCAAATATACTGGATAAGATAATACT 2015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        650
                                                                                                                                                                                     685 TATTCAGAAAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGATTCT 744
                                                                                                                                                                                                                                                                625 ATAACTAATTATGAATATGAAATTGATATTTGGTCATTGGGTATAATTTTGACTGGTTTA 684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATGTTAGTGATTTATATTTAAATCAAATATTTGAAAATTTCGGTACACCCAATTTA 804
                                                                                                                                                    TGTTATTGATTTACATGAGGTGTTGTTTTAGAACTTAAACATATAATTCATAAATATTGT
                                                                                                                                                                                                                         ATTTTTAAATATGAAGCTGCAGTTTTTCATGTATTATTGAGCATACTGTACCAAGCACCA 2135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGATGAATAATAATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAAATTAAGGTAACATATTTTAACTCCTACATTTTTTAAATGAAACTGTATAATATT 5316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCAAATATTTGAAAATTTCGGTACACCCAATTTAACTGATTTTGAAGATGAATTATTTT 829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAGTCAAAGATGATAAAGAATTGACTAATGATTCTCATGTTAGTGATTTATATTTAA 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATTTGGTCATTGGGTATAATTTTGACTGGTTTATATTCAGAAAATTTTCAAAGTGTTT
ACTTATTTTGTATATTACTTATTTTGGKTCCAATATAATGTTGCATA 1968
                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                     52.48;
                                                                                                                                                                                                                                                                                                                                                                                                                  A,T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          849
                                                                                                                                                                                                                                                                                                                                                                                                                  Ç
                                                                                                                                                                                                                                                                                                  Score 56.6; DB 6;
Pred. No. 0.69;
2; Mismatches 106;
                                                                                                                                                                                                                                                                                                                                                                                                                    ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-SPECIFIC
                                                                                                                                                                                                                                                                                                       106;
                                                                                                                                                                                                                                                                                                                                         Length 5563;
                                                                                                                                                                                                                                                                                                       Indels
                                    851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Note
                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5376
                                                                                                                                                    2075
                                                                                                                                                                                                                                                                                                       0;
```

RESULT 15 US-10-027-632-113152 ; Sequence 113152, Application US/10027632 ; GENERAL INFORMATION:

```
APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
FILE REFERENCE: 108627,129
CURRENT APPLICATION NUMBER: US/10/027,632
CURRENT FILING DATE: 2002-04-30
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR FILING DATE: 2000-07-12
PRIOR PRILING DATE: 2000-07-12
PRIOR PPLICATION NUMBER: US 60/19,676
PRIOR PPLICATION NUMBER: US 60/19,483
PRIOR PPLICATION NUMBER: US 60/193,483
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR APPLICATION NUMBER: US 60/185,363
PRIOR APPLICATION NUMBER: US 60/185,363
PRIOR FILING DATE: 1000-03-29
PRIOR APPLICATION NUMBER: US 60/185,363
PRIOR APPLICATION NUMBER: US 60/185,363
PRIOR APPLICATION NUMBER: US 60/186,358
PRIOR APPLICATION NUMBER: US 60/166,358
PRIOR APPLICATION NUMBER: US 60/166,002
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR FILING DATE: 1999-09-28
PRIOR FILING DATE: 1999-09-09
NUMBER OF SED ID NOS: 325720
SOFTWARE: FastSEQ for Windows Version 4.0
SED ID NO 113152
TYPE: DNA
ORGANISM: Human
US-10-027-632-113152
                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                         Вb
                                                                                                                                                                                                                                                                         QY
                                                                                                                                                                                                                                                                                                                    Ъ
                                                                                                                                                                                                                                                                                                                                                                                                  ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                 ρ
                                                                               В
                                                                                                                    δÃ
                                                                                                                                                          밁
                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 5.5%; Score 56.2; DB 6; Length 628; Best Local Similarity 51.6%; Pred. No. 0.77; Matches 174; Conservative 1; Mismatches 159; Indels
862 AAAAAATTCAATTTACAAAAATATCCTAGAAAAGATTGGGATATTATTTTTACCTCGATGC 921
                                                                                                                                                                                                                                                                                                                  683 TATATTCAGAAAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGATT 742
                                                                                   398
                                                                                                    922 AATGATGATTTAATGAAAGAAATTTTTACCAAGATGATTAGATATGATCGAAGTAAAAGA 981
                                                                                                                                                          803 TAACTGATTTTGAAGATGA-ATTATTTTGTGATGAATATAATAATGAAAACTTGCATTTT 861
                                                                                 ω,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2
```

Search completed: May 29, 2002, 14:55:26 Job time: 17855 sec

```
Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        seq length:
seq length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pending_Patents_NA_Main:*

1: /cgn2_6/ptodata/1/pna/PCTUS_COMB.seq:*

2: /cgn2_6/ptodata/1/pna/US06_COMB.seq:*

3: /cgn2_6/ptodata/1/pna/US08_COMB.seq:*

4: /cgn2_6/ptodata/1/pna/US081_COMB.seq:*

5: /cgn2_6/ptodata/1/pna/US082_COMB.seq:*

6: /cgn2_6/ptodata/1/pna/US082_COMB.seq:*

7: /cgn2_6/ptodata/1/pna/US083_COMB.seq:*

9: /cgn2_6/ptodata/1/pna/US085_COMB.seq:*

9: /cgn2_6/ptodata/1/pna/US085_COMB.seq:*

10: /cgn2_6/ptodata/1/pna/US085_COMB.seq:*

11: /cgn2_6/ptodata/1/pna/US088_COMB.seq:*

12: /cgn2_6/ptodata/1/pna/US088_COMB.seq:*

13: /cgn2_6/ptodata/1/pna/US086_COMB.seq:*

14: /cgn2_6/ptodata/1/pna/US089_COMB.seq:*

15: /cgn2_6/ptodata/1/pna/US089_COMB.seq:*

16: /cgn2_6/ptodata/1/pna/US089_COMB.seq:*

17: /cgn2_6/ptodata/1/pna/US090_COMB.seq:*

18: /cgn2_6/ptodata/1/pna/US090_COMB.seq:*

19: /cgn2_6/ptodata/1/pna/US090_COMB.seq:*

10: /cgn2_6/ptodata/1/pna/US090_COMB.seq:*

11: /cgn2_6/ptodata/1/pna/US090_COMB.seq:*

12: /cgn2_6/ptodata/1/pna/US090_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         May 29, 2002, 09:55:11; Search time 3703.9 Seconds (without alignments) 5952.094 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-072-994A-13
1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21979536 seqs, 10817449327 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
'/cgn2_6/ptodata/1/pna/US03_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US03_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US094_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US096B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US096B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US096B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US096B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US097B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US097B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US097B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US097B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US098B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US099B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US099B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US099B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US099B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US090B_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US001_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US001_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US001_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US001_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US001_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US003_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US003_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US003_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US003_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US003_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US003_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US003_COMB.seq:*
'/cgn2_6/ptodata/1/pna/US003_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGAAGTTGTCAGATTATTA.....TTACAATTAATGTTGGATTG 1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  43959072
```

```
44: /cgn2_6/ptodata/1/pna/US6005_COMB.seq:*
45: /cgn2_6/ptodata/1/pna/US6006_COMB.seq:*
46: /cgn2_6/ptodata/1/pna/US6009_COMB.seq:*
47: /cgn2_6/ptodata/1/pna/US6009_COMB.seq:*
48: /cgn2_6/ptodata/1/pna/US6009_COMB.seq:*
50: /cgn2_6/ptodata/1/pna/US6011_COMB.seq:*
51: /cgn2_6/ptodata/1/pna/US6012_COMB.seq:*
52: /cgn2_6/ptodata/1/pna/US6012_COMB.seq:*
53: /cgn2_6/ptodata/1/pna/US6015_COMB.seq:*
54: /cgn2_6/ptodata/1/pna/US6015_COMB.seq:*
55: /cgn2_6/ptodata/1/pna/US6016_COMB.seq:*
56: /cgn2_6/ptodata/1/pna/US6017_COMB.seq:*
57: /cgn2_6/ptodata/1/pna/US6017_COMB.seq:*
59: /cgn2_6/ptodata/1/pna/US6017_COMB.seq:*
60: /cgn2_6/ptodata/1/pna/US6017_COMB.seq:*
61: /cgn2_6/ptodata/1/pna/US6020_COMB.seq:*
62: /cgn2_6/ptodata/1/pna/US6020_COMB.seq:*
63: /cgn2_6/ptodata/1/pna/US6020_COMB.seq:*
64: /cgn2_6/ptodata/1/pna/US6020_COMB.seq:*
65: /cgn2_6/ptodata/1/pna/US6020_COMB.seq:*
66: /cgn2_6/ptodata/1/pna/US6020_COMB.seq:*
67: /cgn2_6/ptodata/1/pna/US6020_COMB.seq:*
68: /cgn2_6/ptodata/1/pna/US6020_COMB.seq:*
70: /cgn2_6/ptodata/1/pna/US6020_COMB.seq:*
71: /cgn2_6/ptodata/1/pna/US6031_COMB.seq:*
72: /cgn2_6/ptodata/1/pna/US6031_COMB.seq:*
73: /cgn2_6/ptodata/1/pna/US6031_COMB.seq:*
74: /cgn2_6/ptodata/1/pna/US6031_COMB.seq:*
75: /cgn2_6/ptodata/1/pna/US6035_COMB.seq:*
76: /cgn2_6/ptodata/1/pna/US6035_COMB.seq:*
76: /cgn2_6/ptodata/1/pna/US6035_COMB.seq:*
76: /cgn2_6/ptodata/1/pna/US6035_COMB.seq:*
77: /cgn2_6/ptodata/1/pna/US6035_COMB.seq:*
76: /cgn2_6/ptodata/1/pna/US6035_COMB.seq:*
77: /cgn2_6/ptodata/1/pna/US6035_COMB.seq:*
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result

Query

31	c 30	c 29						23	22	21	. 20	19	c 18	17	16	15	14	13	12	11	10	9	80	7	6	Ⴠ	4	w	2	ٔ بر	No.
79	80.6	81.8	82	82	82		82.8	2	ω	85		85		221.8	252.4	258	260.4	262	1003	1003	1004.6	1004.6	1004.6	1004.6	1004.6	1004.6	1019	1019	1019	1019	Score
7.8	7.9	8.0	8.0		8.0	8.1	8.1	8.1	8.2	8.3	8.3	8.3	8.4	21.8	4.	25.3	5	5		98.4	98.6	98.6	œ	98.6	8	98.6	100.0		100.0	100.0	Match
223320	1326	13859	1770	1770	1770	1143	1016	899	1326	1770	1770	1770	223320	250	277	260	262	262	1038	1038	1020	1020	1020	1020	1020	1020	1019	1019	1019	1019	Match Length
63	26	35	57	55	28	59	59	22	26	57	55	28	63	51	51	51	51	51	48	16	70	64	37	37	18	1	17	17	14	14	Bd
US-60-242-679-528	US-09-663-779-8205	US-09-950-083-10355	US-60-183-791-6286	US-60-164-320-6286	US-09-703-708-6286	-458-3675	US-60-207-458-33653	US-09-565-306-24647	-779-	US-60-183-791-6286	US-60-164-320-6286	US-09-703-708-6286	US-60-242-679-528	US-60-127-461-4911	US-60-127-461-6291	US-60-127-461-6591	US-60-127-461-3655	US-60-127-461-6643	US-60-096-409-4351	US-09-248-796-4351	US-60-314-050-6173	US-60-259-128-4099	US-10-072-851-14283	US-10-032-585-6173	US-09-463-962-1	PCT-US02-03987-14283	305-	-09-305-	-09	US-09-072-994-13	ID
Sequence 528, App	Sequence 8205, Ap		•	6286,		Sequence 36757, A	Sequence 33653, A	•		6286,	6286,	6286,	e 528, F		6291,	6591,	3655,			4351,	6173,		Sequence 14283, A	61.	Sequence 1, Appli	14283		13,	e 13,	Sequence 13, Appl	Description

O a O

o o

```
US-09-072-994-13
; Sequence 13, App.
; GENERAL INFORMA
APPLICANT: C
; APPLICANT: D
                                                                                                                                         ; FEATURE:
; NAME/KEY:
; LOCATION:
US-09-072-994-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 13, Application US/09072994 GENERAL INFORMATION:
                                                                                   Query Match
Best Local Similarity
Matches 1019; Conserv
                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/09/
FILING DATE: 05-MAY-1998
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Vincent, Matthew P.
REGISTRATION NUMBER: 36,70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII (text)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Cottarel, Guillaume
APPLICANT: Damagnez, Veronique
APPLICANT: Draetta, Guilo
TITLE OF INVENTION: Cell-Cycle Regulatory Proteins from
TITLE OF INVENTION: Human Pathogens, and Uses Related Thereto
NUMBER OF SEQUENCES: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley, Hoag & Eliot,
STREET: One Post Office Square
                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 1019 base pair
                                                                                                                                                                         FEATURE:
                                                                                                                                                                                    MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                     STREET: One F
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109
                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: both
TOPOLOGY: linear
          61 ATATATACGGCTATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAATAGTTGATGAA 120
61 ATATATACGGCTATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAAATAGTTGATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              76.2
75.6
75.4
75.4
75.4
74.6
74.6
74.6
73.8
73.8
                                         ATGAAGTTGTCAGATTATTATATAGACAAGGAATTAATTTACAATAGTGCCATTTCTGAT
                                                                                                                                                                                                                              1019 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                   USA
                                                                                   100.0%; Score 1019; DB 14; ilarity 100.0%; Pred. No. 9.8e-159; Conservative 0; Mismatches 0;
                                                                                                                                                                CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              192014
98573
1033
1680
1680
11062
1744
1744
192014
32768
32768
1141
22350
1190
988
                                                                                                                                                                                                                                                                                                                                US/09/072,994
                                                                                                                                                                                                                                                                       36,709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-60-248-823-33
US-60-248-05-542
US-09-705-926-15063
US-09-248-796-4378
US-60-193-464-19056
US-09-387-720-1
US-60-298-690-1
US-60-298-690-1
US-60-234-446-433
US-09-806-708A-22
US-60-245-228-17
US-60-277-458-3950
US-09-666-355A-774
                                                                                                                                                                                                                                                                MIV032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALIGNMENTS
                                                                                      Indels
                                                                                                        Length 1019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 33, Appl
Sequence 542, App
Sequence 16063, A
Sequence 4378, Ap
Sequence 4378, Ap
Sequence 19056, A
Sequence 1, Appli
Sequence 33, Appl
Sequence 33, Appl
Sequence 22, Appl
Sequence 27, Appl
Sequence 36950, A
Sequence 774, Appl
                                                                                      0;
                                                                                    Gaps
                                          60
                                                                                      0;
                                            RESULT 2
US-09-072-994A-13
; Sequence 13, Application US/09072994A
; GENERAL INFORMATION:
; GENERAL INFORMATION:
Damagnez, Veronique
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                            δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                      В
                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                   ρy
                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                             ΩĀ
                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                 961
                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATTTCAGTCTTCCACCACATTCAATCCATCGAGAAATTTTTATACTTAAAACTTTGAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATTTATTCATTCACAAGGGATAATTCATCGTGATATAAAACCCAGTAATATTTCTTT
 NUMBER OF SEQUENCES: 27 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAATTTATTCACTACACAAGGGATAATTCATCGTGATATAAAACCCAGTAATATTTTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGAACAACACGATTTATTTATGGTAITAATGGTAATCTTGTTAGTAATCAATATACACTT 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTCACCAAATTGTATCGTTATGATTTGAGTCAATTGAATTGAAATTACAAAATATTGTAAA 300
                                 TITLE OF INVENTION: Cell-Cycle Regulatory Proteins from
                                                                                                                                           AGATATGATCGAAGTAAAAGAATAACTTCTAAAGAAATCTTACAATTAATGTTGGATTG
                                                                                                                                                                                     GAAAATTTCGGTACACCCAATTTAACTGATTTTGAAGAIGAATTATTTTGTGAATAT
                                                                                                                                                                                                                                                                                                                                                              CTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCCGGGATGATATAACACAACCGATTATTGGAGATTTTGATATTTGTTATGATATTTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGAACAACACGATTTATTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTT
                                                                                                                                                                                                                                                                                                                     GATAAAGAATTGACTAATGATTCTCATGTTAGTGATTTATATTTATAAATCAAATATTT
                                                                                                                                                                                                                                                                            GAAAATTTCGGTACACCCAATTTAACTGATTTTGAAGATGAATTATTTTGTGATGAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTAT
                      Human Pathogens, and Uses Related
                                                                                                                                               1019
                                                                                                                                                                    1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                       600
                                                                                                                                                                                                              960
                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                        900
```

В Qγ βb δÃ

```
LUCATION: 1..1017; SEQUENCE DESCRIPTION: SEQ ID NO: US-09-072-994A-13
                                          밁
                                                              δÃ
                                                                                                  밁
                                                                                                                     Qy
                                                                                                                                                       Вþ
                                                                                                                                                                                Q
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                     ďg,
                                                                                                                                                                                                                                                                                                                                                     δõ
                                                                                                                                                                                                                                                                                                                                                                                        ₽.
                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 1019; DB 14; Best Local Similarity 100.0%; Pred. No. 9.8e-159; Matches 1019; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                             181
                                                                                                                                                          241
                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 08/463,090
FILING DATE: 05-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Vincent, Matthew P.
REGISTRATION NUMBER: 36,709
REFERENCE/DOCKET NUMBER: MIV-032.02
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-832-1000
TELEFAX: 617-832-7000
                                                                                                                               301
                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                     _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
                                         CGAACAACACGATTTATTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTT
                                                                                                                                                         GATTTCAGTCTTCCACCACATTCAATCCATCGAGAAATTTTTATACTTAAAAACTTTGAAA 180
                                                                                                                                                                                                                                                                                        GATTTCAGTCTTCCACCACATTCAATCCATCGAGAAATTTTTATACTTAAAACTTTTGAAA 180
                                                                                                                                                                                                                                                                                                                                ATATATACGGCTATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAATAGTTGATGAA 120
                                                                                                                                                                                                                                                                                                                                                                                       GAATTTATTCATTCACAAGGGATAATTCATCGTGATATAAAACCCAGTAATATTTTCTTT
                                                                                                   CGAACAACACGATTTATTTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTT
                                                                                                                                                                                      ADDRESSEE: FOLEY, HOAG & ELIOT LLP STREET: One Post Office Square CITY: Boston STATE: WA COUNTRY: USA COUNTRY: USA CIP: 02109-2170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/072,994A FILING DATE: 05-May-1998 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: nucleic acid
STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ENGTH: 1019 base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                480
                                                                        420
                                                                                                                                                          300
                                                                                                                                                                                      300
                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              멍
; LOCATION:
US-09-305-929-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                            US-09-305-929-13
                                                                                                                                                                                                                                                                                                                                                               Sequence 13, Application US/09305929 GENERAL INFORMATION:
                                                                                                                          APPLICATION NUMBER: US
FILING DATE: 05-JUN-19
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                      CURRENI AFFLICATION NUMBER: US/OFFILING DATE:
FILING DATE:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US
                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTTWARE: ASCII (text)
CURRENT APPLICATION DATA:
                                         MOLECULE TYPE: FEATURE:
                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: CY
NUMBER OF SEQUENCES: 1
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721 GATAAAGAATTGACTAATGATTCTCATGTTAGTGATTTATATTTATATTTAAATCAAATATTT 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601 AAAGCACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTGGTCA 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541 CTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTAT 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781 GAAAATTTCGGTACACCCAATTTAACTGATTTTGAAGATGAATTATTTTGTGATGAATAT 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541 CTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTAT 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481 GCCCGGGATGATATAACACAACCGATTATTGGAGATTTTGATATTTGTTATGATTTAAAA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421 GAATTTATTCATTCACAAGGGATAATTCATCGTGATATAAAACCCAGTAATATTTTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS:
TOPOLOGY: li
                          NAME/KEY:
                                                                                                                                                                                                                                                                                         MEDIUM TYPE:
                                                                                                               LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGCACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATAATGAAAACTTGCATTTTAAAAAATTCAATTTACAAAAATATCCTAGAAAAGATTGG 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAAATTTCGGTACACCCAATTTAACTGATTTTGAAGATGAATTATTTTGTGATGAATAT
                                                                                nucleic acid
DEDNESS: both
                                                                                                            1019 base pairs
                                                                    linear
                                                                                                                                                                                                                                                                                       Floppy disk
                                                                                                                                                        05-JUN-1995
                                                                                                                                                                                                                                                                                                                      Cyclin Activating Kinase (CAK) from Human
                                                                                                                                                                                                                   US/09/305,929
                                                                                                                                                                       08/463,090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
```

Query Match Best Local Similarity Matches 1019; Conserv

Conservative

100.0%; Score 1019; DB 17; 100.0%; Pred. No. 9.8e-159; tive 0; Mismatches 0;

Indels

0,

Gaps

0;

Length 1019;

Qy Дb Qy Вþ δÃ

```
Qy
                                                                                                                                                                                             B 8
                                                                                                                                                                                                                           45 G
                                                                                                                                                                                                                                                           DΪ
                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                               dd
VQ
                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                      g 4g
                                                                                                                                                                                                                 Дb
                                                                                               δÃ
                                                                                                        DP QA
                                                                                                                              망
                                                                                                                                       QΥ
                                                                                                                                                  DЪ
                    g
70
                                          뫄
                                                  δδ
                                                                4α
γΩ
                                                                                  Вþ
        Qy
                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                   121
                                                                                                                     661
                                                                                                                                 601
                                                                                                                                          601
                                                                                                                                                     541
                                                                                                                                                               541
                                                                                                                                                                          481
                                                                                                                                                                                    481
                                                                                                                                                                                               421
                                                                                                                                                                                                         421
                                                                                                                                                                                                                    361
                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                    301
                                                                           781
                                                                                      721
                     901
                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                        ATGAAGTTGTCAGATTATATATAGACAAGGAATTAATTTACAATAGTGCCATTTCTGAT
                                                                                                          CTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTAT
                                                                                                                                                                                                                                               CGAACAACACGATTTATTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTT
                                                                                                                                                                                                                                                               GAAAATTTCGGTACACCCAATTTAACTGATTTTGAAGATGAATTATTTTGTGATGAATAT
                                                                                                                                                                               GCCCGGGATGATATAACACAACCGATTATTGGAGATTTTGATATTTGTTATGATTTTAAAA
                                                                                                                                                                                                                                          CGAACAACACGATTTATTTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTT
AGATATGATCGAAGTAAAAGAATAACTTCTAAAGAAATCTTACAATTAATGTTGGATTG
                     GATAAAGAATTGACTAATGATTCTCATGTTAGTGATTTATATTTATAAATCAAATATTT
                                                                                                                                AAAGCACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTGGTCA
                                                                                                                                                                           GCCCGGGATGATAACACAACCGATTATTGGAGATTTTGATATTTGTTATGATTTAAAAA
            1019
                                                                                                                                            660
                                                                                                                                                                                      540
                                                                                                                                                                                                 480
                                                                                                                                                                                                            480
                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                  660
                                                                                                                                                       600
                                                                                                                                                                           540
                                                                  840
```

RESULT 4 US-09-305-929A-13

Sequence 13,

Application

US/09305929A

```
CURRENT APPLICATION NUMBER: US/09/305,92;
CURRENT FILING DATE: 1999-05-05;
PRIOR APPLICATION NUMBER: 09/072,994
PRIOR FILING DATE: 1998-05-05
PRIOR APPLICATION NUMBER: 08/463,090
PRIOR FILING DATE: 1995-06-05
NUMBER OF SEQ ID NOS: 34
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 13
LENGTH: 1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(1017)
US-09-305-929A-13
                                                                                                                                                                                                                                                                                                                                                                                     Вb
                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                             뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                 QY
                           밁
                                                   QΥ
                                                                                   В
                                                                                                          Qy
                                                                                                                                              Дb
                                                                                                                                                                       Qy
                                                                                                                                                                                                         Вb
                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: BERLIN, VIVIAN
APPLICANT: COTTAREL, GUILLAUME
APPLICANT: COTTAREL, GUILLAUME
TITLE OF INVENTION: CYCLIN ACTIVATION KINASE (CAK) FROM HUMAN PATHOGENS,
TITLE OF INVENTION: AND USES RELATED THERETO
TITLE OF INVENTION: AND USES RELATED THERETO
TITLE OF INVENTION: AND USES RELATED THERETO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100
Best Local Similarity 100
Matches 1019; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Candida
                                                                                                                                              481
                                                                                                                                                                                                          421
                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                  541
                                                                                                                                                                            481
                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGAAGTTGTCAGATTATTATATAGACAAGGAATTAATTTACAATAGTGCCATTTCTGAT 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATATACGGCTATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAATAGTTGATGAA 120
                                                                                                                                                                                                                                                                 CGAACACACGATTTATTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTT
                                                                                                                                                                                                                                                                                                                                                                                                   CCACATCCAAACATAATTGAATATTTTAATGATCTTAAAATTTATGATGATGATGATTATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gatttcagtcttccaccacattcaatccatcgagaaatttttatacttaaaactttgaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATTTCAGTCTTCCACCACATTCAATCCATCGAGAAATTTTTATACTTAAAACTTTGAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atatatacggctattgataagtttaataacttaccagtatgtcttaaaatagttgatgaa 120
                                                                                   CTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTAT
                                                                                                                                                                                                         gaatttattcattcacaagggataattcatcgtgatataaaaccccagtaatattttcttt
                                                                                                                                                                                                                       GAATTTATTCACTACACAAGGGATAAATTCATCGTGATATAAAACCCCAGTAATATTTTCTTT
                                                                                                                                                                                                                                                                                                                         cgaacaacacgatttatttatggtattaatggtaatcttgttagtaatcaatatacactt
                                                                                                                                                                                                                                                                                                                                                                                     ccacatccaaacataattgaatattttaatgatcttaaaaatttatgatgatgttatatta
                                                                                                                                             gcccgggatgatataacacaaccgattattggagattttgatatttgttatgatttaaaa
                                                                                                                                                              GCCCGGGATGATATAACACAACCGATTATTGGAGATTTTGATATTTGTTATGATTTTAAAA
                                           AAAGCACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTGGTCA
TTGGGTATAATTTTGACTGGTTTATATTCAGAAAATTTTCAAAGTGTTTTAGTCAAAGAT
                           aaagcaccagaattgattcttggtataactaattatgaatatgaaattgatatttggtca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 1019; DB 17;
Pred. No. 9.8e-159;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                       600
                                                                                                                                                                                                               480
                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                           600
                                  660
```

0,

```
; TYPE: DNA
; ORGANISM: Candida
PCT-US02-03987-14283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 5
PCT-US02-03987-14283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: PCT/US02/03987
CURRENT FILING DATE: 2002-02-02
PRIOR APPLICATION NUMBER: 60/267,636
PRIOR FILING DATE: 2001-02-09
NUMBER OF SEO ID NOS: 15811
SOFTWARE: FastSEQ for Windows Version 4.0
SEO ID NO 14283
LENGTH: 1020
                                                                                                                                                                                                                                                                                                                                                           Ouery Match 98.6
Best Local Similarity 99.1
Matches 1010; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 14283, Application PC/TUSO: GENERAL INFORMATION:
APPLICANT: Elitra Pharmaceuticals,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Methods f
TITLE OF INVENTION: Prolifer
FILE REFERENCE: ELITRA.028VPC
      301
                                301
                                                            241
                                                                                          241
                                                                                                                        181
                                                                                                                                                     181
                                                                                                                                                                                   121
                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                1 ATGAAGTTGTCAGATTATTATATAGACAAGGAATTAATTTACAATAGTGCCATTTCTGAT
               CGAACACACACTTATTTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTT
                                                                      CCACATCCAAACATAATTGAATATTTTAATGATCTTAAAATTTTATGATGATGATGATTATATTA
                                                                                                                                                                         gatttcagtcttccaccacttcaatccatcgagaagttcttatacttaaaactttgaaa
                                                                                                                                                                                         GATTTCAGTCTTCCACCACATTCAATCCATCGAGAAATTTTTATACTTAAAACTTTGAAA 180
                                                                                                                                                                                                                                   atatatacggctattgataagtttaataacttaccagtatgtcttaaaatagttgatgaa
cgaacaacacgatttatttatggtattaatggtaatcttgttagtaatcaatatacactt
                                                         ccacatccaaacataattgaatattttaatgatcttaaaatttgtgacgatattatatta
                                                                                                                                                                                                                                                 ATATATACGGCTATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAATAGTTGATGAA 120
                                                                                                                                                                                                                                                                                                atgaagttgtcagattattatatagacaaggaattaatttacaatagtgccatttctgat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAAATTTCGGTACACCCAATTTAACTGATTTTGAAGATGAATTATTTTGTGAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGATATGATCGAAGTAAAAGAATAACTTCTAAAAGAAATCTTACAATTAATGTTGGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aataatgaaaacttgcattttaaaaaattcaatttacaaaaatatcctagaaaagattgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               agatatgatcgaagtaaaagaataacttctaaagaaatcttacaattaatgttggattg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATAATGAAAACTTGCATTTTAAAAAATTCAATTTACAAAAATATCCTAGAAAAGATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATAAAGAATTGACTAATGATTCTCATGTTAGTGATTTATATTTATATTTAAATCAAATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gataaagaattgactaatgattctcatgttagtgatttatattattaaatcaaatattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application PC/TUS0203987
                                                                                                                                                                                                                                                                                                                                                                                                                                                  albicans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Proliferation
                                                                                                                                                                                                                                                                                                                                                                            98.6%;
99.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for
                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                          Score 1004.6; DB 1;
Pred. No. 2.3e-156;
0; Mismatches 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Identifying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Target of a Compound which Inhibits
                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                       1020;
                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1019
360
                                                                                                                                               240
                                                                                                                                                                             180
                                                        30C
                                                                                                                 240
                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                               FILE REFERENCE: 0846-0536-0XECT
CURRENT APPLICATION NUMBER: US/09/463,962
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/FR98/01788
PRIOR FILING DATE: 1998-08-11
PRIOR APPLICATION NUMBER: F897/10287
PRIOR APPLICATION NUMBER: F897/10287
UNUMBER OF SEQ ID NOS: 2
SOFTWARE: Daterner
                                                                                                                                                                                                                                                                                                                          US-09-463-962-1
; Sequence 1, Ap
; GENERAL INFORM
; APPLICANT: F
          US-09-463-962-1
                                                                                                                                                                                                                                                                                                                                                                                                                                 DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                           SEQ ID NO 1 LENGTH: 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                                                                                                                        Sequence 1, Applicat GENERAL INFORMATION:
                                                                                                                                                                                                                                              APPLICANT: VALAY, JEAN-GABRII
APPLICANT: MANN, CARL
APPLICANT: THURET, JEAN-YVES
TITLE OF INVENTION: KINASE;
FILE REFERENCE: 0846-0536-0)
                        TYPE: DNA
ORGANISM:
FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                      σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATAATGAAAACTTGCATTTTAAAAAATTCAATTTACAAAAATATCCCTAGAAAAGATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAAATTTCGGTACACCCAATTTAACTGATTTTTGAAGATGAATTATTTTTGTGATGAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATAAAGAATTGACTAATGATTCTCATGTTAGTGATTTATATATTAAATCAAATATTT 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGGGTATAATTTTGACTGGTTTATATTCAGAAAATTTTCAAAAGTGTTTTAGTCAAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                           agatatgatcgaagtaaaagaataacttctaaagaaatcttacaattaatgttagattg
                                                                                                                                                                                                                                                                                                                                                                                                                                           AGATATGATCGAAGTAAAAGAATAACTTCTAAAGAAATCTTAACAATTAATGTTGGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aataatgaaaacttgcattttaaaaaattcaatttacaaaaatatcctagaaaagattgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gaaaatttcggtacacccaatttaactgattttgaagatgaattattttgtgatgaatat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaagcaccagaattgattcttggtataactaattatgaatatgaaattgatatttggtca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGCACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTTGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCCGGGATGATATAACACAACCGATTATTGGAGATTTTGATATTTGTTATGATTTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTAATGAAATTGAAGAAAAAGATATCAAATTATGGTTAAAATCAATGAGTTCAGGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ctgccacctaaagatgaaccccctatggcgaaatatattgatgtatctacaggtatttat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gcccgggatgatataacacaaccgattattggagattttgatattagttatgatttaaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gctaatgaaattgaagaaaaagatatcaaattatggttaaaatcaatgagttcaggactt
                                        CDS
                                                                                                                                                                                                                                                                                                                                                      Application US/09463962
                                                                      Candida
                                                                                                                                                                                                                                                                                                                          FAYE, GERARD
                                                                                                                                                                                                                                                                                                         JEAN-GABRIEL
                                                                                                                              version
                                                                                                                                                                                                                                                               CYCLIN
                                                                                                                                                                                                                                                               PROTEIN KINASES
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1019
                                                                                                                                                                                                                                                                                                                                                                                                                             1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
```

g Q

Qy Вр

B δÃ 밁 δ B δÃ g

δÃ

뭐

Š

Вþ Qy В Š Дb οy g . 9

AND

Вb

```
ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ά.
γο
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멍
                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                   ρy
                                                                                                                                                                                                                                                         рь
                                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                                         뮹
                                                                                                                                                                                                                                                                                                             δÕ
                                                                                                                                                                                                                                                                                                                                Вb
                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                    ф
                                                                                                                                                                                                                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                       QΥ.
                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      γQ
밁
            γQ
                               Db
                                                δõ
                                                                       B 6
                                                                                                       d
VQ
                                                                                                                                               ф
                                                                                                                                                          δÃ
                                                                                                                                                                                  В
                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 1010
                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                 421
                                                                                                           781
                                                                                                                                                721
                                                                                                                                                                721
                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
nes 1010; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         سر
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATTTCAGTCTTCCACCACATTCAATCCATCGAGAAATTTTTATACTTTAAAACTTTTGAAA 180
                                                                                                          GAATTTATTCATTCACAAGGGATAATTCATCGTGATATAAAACCCAGTAATATTTTCTTT
                                                                                                                                                                                                                                                                                                                                                                              GCTAATGAAATTGAAGAAAAAGATATCAAATTATGGTTAAAATCAATGAGTTCAGGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                 CGAACACACGATTTATTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ccacatccaaacataattgaatattttaatgatcttaaaatttgtgacgatattatatta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCACATCCAAACATAATTGAATATTTTAATGATCTTAAAAATTTATGATGATGTTATATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gatttcagtcttccaccacattcaatccatcgagaagttcttatacttaaaactttgaaa
aataatgaaaacttgcattttaaaaaattcaatttacaaaaatatcctagaaaagattgg
                                                                                 AATAATGAAAACTTGCATTTTAAAAAATTCAATTTACAAAAATATCCTAGAAAAGATTGG
                                                                                                                                              GATAAAGAATTGACTAATGATTCTCATGTTAGTGATTTATATTTATAAATCAAATATTT
                                                                                                                                                                                   ttgggtataattttgactggtttatattcagaaaattttcaaaagtgttttagtcaaagat
                                                                                                                                                                                            TTGGGTATAATTTTGACTGGTTTATATTCAGAAAATTTTCAAAGTGTTTTTAGTCAAAGAT
                                                                                                                                                                                                                        aaagcaccagaattgattcttggtataactaattatgaatatgaaattgatatttggtca
                                                                                                                                                                                                                                AAAGCACCAGAATTGATTCTTGGTATAAACTAATTATGAATATGAAATTGATATTTGGTCA
                                                                                                                                                                                                                                                          ctgccacctaaagatgaaccccctatggcgaaatatattgatgtatctacaggtatttat
                                                                                                                                                                                                                                                                  CTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTAT
                                                                                                                                                                                                                                                                                                                                 gaatttattcattcacaagggataattcatcgtgatataaaacccagtaatattttcttt
                                                                                                                                                                                                                                                                                                                                                                     gctaatgaaattgaagaaaaagatatcaaattatggttaaaatcaatgagttcaggactt
                                                                                                                                                                                                                                                                                                                                                                                                       cgaacaacacgatttatttatggtattaatggtaatcttgttagtaatcaatatacactt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98.6%; ilarity 99.1%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Score 1004.6; pred. No. 2.3e 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .3e-156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
 1019
                   1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                             840
                                                                                                                               840
                                                                                                                                                  780
                                                                                                                                                                   780
                                                                                                                                                                                     720
                                                                                                                                                                                                                                                            600
                                     960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
```

```
APPLICANT: Terry, Roemer D.
APPLICANT: Bo, Jiang
APPLICANT: Bo, Jiang
APPLICANT: Charles, Boone
APPLICANT: Howard, Bussey
TITLE OF INVENTION: Gene Disruption
FILE REFERENCE: 10182-005-999
CURRENT APPLICATION NUMBER: US/10/1
CURRENT FILING DATE: 2001-12-20
NUMBER OF SEQ ID NOS: 8000
SOFTWARE: PatentIn version 3.1
SEQ ID NO 6173
SEQ ID NO 6173
SEQ ID NO 6173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: Candida
US-10-032-585-6173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 7
US-10-032-585-6173
; Sequence 6173, Appli.
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
 망
                   Qy
                                               밁
                                                                 Qy
                                                                                               В
                                                                                                                    Qγ
                                                                                                                                              DЬ
                                                                                                                                                                   Qy
                                                                                                                                                                                                 Ъ
                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                DЬ
                                                                                                                                                                                                                                                                    Ωy
                                                                                                                                                                                                                                                                                                 Ъ
                                                                                                                                                                                                                                                                                                                 ΔÃ
                                                                                                                                                                                                                                                                                                                                               Вр
                                                                                                                                                                                                                                                                                                                                                                   Ωy
                                                                                                                                                                                                                                                                                                                                                                                               멍
                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                             Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Si
Matches 1010;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                         481
                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                       181
 661
                                                                                                  541
                                                                                                                         541
                                                                                                                                                481
                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGAACAACACGATTTATTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTT
                                                                                                                                                                                                                                                                                                                                                                                                             CCACATCCAAACATAATTGAATATTTTAATGATCTTAAAAATTTATGATGATGATGTTATATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATTTCAGTCTTCCACCACATTCAATCCATCGAGAAATTTTTATACTTAAAACTTTGAAA
                                                                                                                                                             GCCCGGGATGATATAACACAACCGATTATTGGAGATTTTGATATTTGTTATGATTTAAAA
                                                                                                                                                                                                             GAATTTATTCACTACACAGGGATAATTCATCGTGATATAAAACCCAGTAATATTTTCTTT
                                                                                                                                                                                                                                                                                                                                               gatttcagtcttccaccacattcaatccatcgagaagttcttatacttaaaactttgaaa
                                                            AAAGCACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTTGGTCA
                                                                                                           CTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTAT
                                                                                                                                                                                                 gaatttattcattcacaagggataattcatcgtgatataaaacccattaatattttcttt
                                                                                                                                                                                                                                                             GCTAATGAAATTGAAGAAAAAGATATCAAATTATGGTTAAAATCAATGAGTTCAGGACTT
                                                                                                                                                                                                                                                                                                 cgaacaacacgatttatttatggtattaatggtaatcttgttagtaatcaatatacactt
                                                                                                                                                                                                                                                                                                                                                                         ccacatccaaacataattgaatattttaatgatcttaaaatttgtgacgatattatatta
TIGGGTATAATTTTGACTGGTTTATATTCAGAAAATTTTCAAAGTGTTTTAGTCAAAGAT
                                               aaagcaccagaattgattcttggtataactaattatgaatatgaaattgatatttggtca
                                                                                                ctgccacctaaagatgaaccccctatggcgaaatatattgatgtatctacaggtatttat
                                                                                                                                                gcccgggatgatataacacaaccgattattggagattttgatattagttatgatttaaaa
                                                                                                                                                                                                                                                 gctaatgaaattgaagaaaaagatatcaaattatggttaaaatcaatgagttcaggactt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/10032585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      albicans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98.6%;
99.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disruption Methodologies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/10/032,585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1004.6;
Pred. No. 2.3e-
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .3e-156;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Drug Target Discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1020;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                           600
                                                                                                                                                                                                                            48C
                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                    240
                         720
                                                   660
                                                                                                   600
                                                                                                                                                    54C
                                                                                                                                                                          540
                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
```

```
δÃ
                                          В
                                                                   Qy
                                                                                              DЪ
                                                                                                                20
                                                                                                                                              дδ
                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                  ; ORGANISM: Candida
US-10-072-851-14283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 8
US-10-072-851-14283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ω
                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 1010; Conserv
                                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 14283
LENCTH: 1020
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 14283, Appl GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Boone, Charles
APPLICANT: Bussey, Howard
TITLE OF INVENTION: Methods for Identifying
TITLE OF INVENTION: Proliferation
FILE REFERENCE: ELITRA.028A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/267,636
PRIOR FILING DATE: 2001-02-09
NUMBER OF SEQ ID NOS: 15811
                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/072,851 CURRENT FILING DATE: 2002-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Carr,
                   181
                                                                     121
                                                                                              61
                                                                                                                       61
                                                                                                                                               ---
                                                                                                                                                         1 ATGAAGTTGTCAGATTATTATATAGACAAGGAATTAATTTACAATAGTGCCATTTCTGAT
CCACATCCAAACATAATTGAATATTTAATGATCTTAAAATTTATGATGATGATGATTATTA
                                      ATATATACGGCTATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAATAGTTGATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGATATGATCGAAGTAAAAGAATAACTTCTAAAGAAATCTTACAATTAATGTTGGATTG
                                                                GATTTCAGTCTTCCACCACATTCAATCCATCGAGAAATTTTTATACTTAAAAACTTTGAAA
                                                                                          atatatacggctattgataagtttaataacttaccagtatgtcttaaaatagttgatgaa
                                                                                                                                           atgaagttgtcagattattatatagacaaggaattaatttacaatagtgccatttctgat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          agatatgatcgaagtaaaagaataacttctaaagaaatcttacaattaatgttagattg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aataatgaaaacttgcattttaaaaaattcaatttacaaaaatatcctagaaaagattgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATAATGAAAACTTGCATTTTAAAAAATTCAATTTACAAAATATCCTAGAAAAGATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Haselbeck, Robert
Ohlsen, Kari L.
Zyskind, Judith W.
Wall, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Jiang, Bo
Boone, Charles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Foulkes, J. Goro
Zamudio, Carlos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Yamamoto, Robert T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Trawick, John D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Roemer,
                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Grant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Howard
                                                                                                                                                                                                                                                                               albicans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Terry
                                                                                                                                                                                                           98.6%;
99.1%;
                                                                                                                                                                                                                                                                                                                                                                                   2002-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gordon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/10072851
                                                                                                                                                                                                  0;
                                                                                                                                                                                               Score 1004.6; DB 3
Pred. No. 2.3e-156;
0; Mismatches 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                     the
                                                                                                                                                                                                                                                                                                                                                                                                                                  Target
                                                                                                                                                                                                                        37; Length 1020;
                                                                                                                                                                                                                                                                                                                                                                                                                                 of a
                                                                                                                                                                                                                                                                                                                                                                                                                                  Compound which
                                                                                                                                                                                              0;
                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1019
                                                                180
                                                                                           120
                                                                                                                    120
                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                  Inhibits
                                                                                                                                                                                                         RESULT 9
US-60-259-128-4099
                                                                                                                                                                                                                                                                                    δõ
                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                     QΥ
                                                                                                                                                                                                                                                                                                                                                                 Дb
                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
         NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 4099
LENGTH: 1020
                                                                                                                           APPLICANT: Roemer, T
APPLICANT: Jiang, B
APPLICANT: Boone, C
APPLICANT: Bussey,
                                                                                                                                                                             Sequence 4099, Appli GENERAL INFORMATION:
                                                             FILE REFERENCE: GRACE1
CURRENT APPLICATION NUMBER: US/60/259,128
CURRENT FILING DATE: 2000-12-29
                                                                                                   APPLICANT: Bussey, Howard
TITLE OF INVENTION: Gene Disruption Methodologies
TITLE OF INVENTION: Target Discovery
                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                        GAAAATTTCGGTACACCCAATTTAACTGATTTTGAAGATGAATTATTTTGTGAATGATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGCACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTTGGTCA
                                                                                                                                                                                                                                                                                                                                                                            AATAATGAAAACTTGCATTTTAAAAAATTCAATTTACAAAAATATCCCTAGAAAAGATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATAAAGAATTGACTAATGATTCTCATGTTAGTGATTTTATATTTATAAATCAAATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCCGGGATGATATAACACAACCGATTATTGGAGATTTTGATATTTGTTATGATTTTAAAA
                                                                                                                                                                                                                                                                                                          aataatgaaaacttgcattttaaaaaattcaatttacaaaaatatcctagaaaagattgg
                                                                                                                                                                                                                                                                                                                                                                                                               gaaaatttcggtacacccaatttaactgattttgaagatgaattattttgtgatgaatat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aaagcaccagaattgattcttggtataactaattatgaatatgaaattgatatttggtca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ctgccacctaaagatgaaccccctatggcgaaatatattgatgtatctacaggtatttat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAATTTATTCATTCACAAGGGATAAATTCATCGTGATATAAAACCCAGTAATATTTTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gctaatgaaattgaagaaaaagatatcaaattatggttaaaatcaatgagttcaggactt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGAACAACACGATTTATTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gcccgggatgatataacacaaccgattattggagattttgatattagttatgatttaaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gaatttattcattcacaagggataattcatcgtgatataaaacccattaatattttcttt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTAATGAAATTGAAGAAAAAGATATCAAATTATGGTTAAAATCAATGAGTTCAGGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cgaacaacacgatttatttatggtattaatggtaatcttgttagtaatcaatatacactt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTCACCAAATTGTATCGTTATGATTTGAGTCAATTGAATTGAAATTACAAAATATTGTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ccacatccaaacataattgaatattttaatgatcttaaaatttgtgacgatattatatta
                                                                                                                                       Jiang, Bo
Boone, Charles
                                                                                                                                                                                           Application
                                                                                                                                                                Terry
                                   2000-12-29
5129
Windows Version 4.0
                                                                                                                                                                                           US/60259128
                                                                                                                                                                                                                                                                                                                                     960
                                                                                                                                                                                                                                                                                                                                                                                                                 840
                                                                                                                                                                                                                                                                                                                                                                                                                                         840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
```

540 540 480

42C 420 360 300

360

660 660 600 600

960

us;

ORGANISM: Candida albicans 60-259-128-4099

```
oy
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·β &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QΥ
, Q
                                                                                                                            40
60
                                                                                                                                                                d
V
                                                                                                                                                                                                 밁
                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                       ф
                                                                                                                                                                                                                                                                                                                        γQ
                                                                                                                                                                                                                                                                                                                                            B 8
                                                                                                                                                                                                                                                                                                                                                                             β Q
                                                                                                                                                                                                                                                                                                                                                                                                           뫄
                       B
                                                     뮰
                                                                        QΥ
                                                                                         B 8
                                    δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 1010; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                              781
                                                                                                                                721
                                                                                                                                                                   661
                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGAAGTTGTCAGATTATTATATAGACAAGGAATTAATTTACAATAGTGCCATTTCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTAATGAAATTGAAGAAAAAGATATCAAATTATGGTTAAAATCAATGAGTTCAGGACTT
                                                                                                                                                                                                                                                                                                                                                                                        CGAACAACACGATTTATTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTT
                                                                                                                                                                                                                                                                                                                                                                                                                         GAAAATTTCGGTACACCCAATTTAACTGATTTTGAAGATGAATTATTTTGTGAATAT
                                                                                                                               AAAGCACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTTGGTCA
                                                                                                                                                                                                                                       ctgccacctaaagatgaaccccctatggcgaaatatattgatgtatctacaggtatttat
                                                                                                                                                                                                                                                 CTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTAT
                                                                                                                                                                                                                                                                          gcccgggatgatataacacaaccgattattggagattttgatattagttatgatttaaaa
                                                                                                                                                                                                                                                                                 GCCCGGGATGATATAACACAACCGATTATTGGAGATTTTGATATTTGTTATGATTTAAAA
                                                                                                                                                                                                                                                                                                                                             gctaatgaaattgaagaaaaagatatcaaattatggttaaaatcaatgagttcaggactt
                                                                                                                                                                                                                                                                                                                                                                               cgaacaacacgatttatttatggtattaatggtaatcttgttagtaatcaatatacactt
                                                                                                                                                                                                                                                                                                                                                                                                                GATTTCAGTCTTCCACCACATTCAATCCATCGAGAAATTTTTATACTTAAAACTTTGAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atatatacggctattgataagtttaataacttaccagtatgtcttaaaatagttgatgaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATATACGGCTATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAATAGTTGATGAA 120
         AGATATGATCGAAGTAAAAGAATAACTTCTAAAGAAATCTTACAATTAATGTTGGATTG
                                                           aataatgaaaacttgcattttaaaaaattcaatttacaaaatatcctagaaaagattgg
                                                                    AATAATGAAAACTTGCATTTTAAAAAATTCAATTTACAAAAATATCCCTAGAAAAGATTGG
                                                                                              gaaaatttcggtacacccaatttaactgattttgaagatgaattattttgtgatgaatat
                                                                                                                                                                                                    \verb|aaagcaccagaattgattcttggtataactaattatgaatatgaaattgatatttggtca|
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1004.6;
Pred. No. 2.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .3e-156;
les 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1020;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
          1019
                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                            960
                                                                                                840
                                                                                                                                  780
                                                                                                                                                  780
                                                                                                                                                                    720
                                                                                                                                                                                                       660
                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                           540
                           960
                                                            900
                                                                              900
                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
```

```
APPLICANT: ROEMER, TEITY
APPLICANT: Jiang, Bo
APPLICANT: Jiang, Bo
APPLICANT: Boone, Charles
APPLICANT: Boone, Charles
APPLICANT: Ohlsen, Kari L.
TITLE OF INVENTION: GENE DISRUPTION METHODOLOGIES FOR
FILE REPERENCE: 10182-013-888
CURRENT APPLICATION NUMBER: US/60/314,050
CURRENT APPLICATION NUMBER: US/60/314,050
CURRENT FILING DATE: 2001-08-22
NUMBER OF SEQ ID NOS: 7834
SOFTWARE: Patentin version 3.1
SEQ ID NO 6173
LENGTH: 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: DNA
; ORGANISM: Candida
US-60-314-050-6173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-60-314-050-6173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вþ
                                                                                            멍
                                                                                                                                                           Qy
                                                                                                                                                                                          밁
                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                          ν,
                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                    ф
                                                                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                                                                                                                                                                    Дb
                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δõ
 g
                     δÃ
                                              밁
                                                                 QΥ
                                                                                                                Qy
                                                                                                                                          В
                                                                                                                                                                                                                                        뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Ma
Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 6173, GENERAL INFORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                    121
 601
                       601
                                              541
                                                                    541
                                                                                            481
                                                                                                                    481
                                                                                                                                            421
                                                                                                                                                                  421
                                                                                                                                                                                          361
                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
nes 1010; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGAAGTTGTCAGATTATTATATAGACAAGGAATTAATTTACAATAGTGCCATTTCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                GATTTCAGTCTTCCACCACATTCAATCCATCGAGAAATTTTTATACTTAAAACTTTGAAA 180
                                                                                          GAATTTATTCATTCACAAGGGATAAATTCATCGTGATATAAAACCCAGTAATATTTTCTTT
                                                                                                                                                                                       CGAACAACACGATTTATTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTT
                                                                                                                                                                                                                                                                                                   CCACATCCCAAACATAATTGAATATTTTAATGATCTTAAAATTTTATGATGATGATGATTATATTA
                                                                                                                                                                                                                                                                                                                                                                                  gatttcagtcttccaccaccattcaatccatcgagaagttcttatacttaaaactttgaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                 atgaagttgtcagattattatatagacaaggaattaatttacaatagtgccatttctgat
             AAAGCACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTGGTCA
                                           ctgccacctaaagatgaaccccctatggcgaaatatattgatgtatctacaggtatttat
                                                         CTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTAT
                                                                                                                                          gaatttattcattcacaagggataattcatcgtgatataaaacccattaatattttcttt
                                                                                                                                                                                                                                      cgaacaacacgatttatttatggtattaatggtaatcttgttagtaatcaatatacactt
                                                                                                                                                                                                                                                                                        ccacatccaaacataattgaatattttaatgatcttaaaatttgtgacgatattatatta
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATATACGGCTATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAATAGTTGATGAA 120
aaagcaccagaattgattcttggtataactaattatgaatatgaaattgatatttggtca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    albicans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/60314050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1004.6; DB 7
Pred. No. 2.3e-156;
0; Mismatches 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     70;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DRUG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TARGET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1020;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISCOVERY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1019
                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                540
                                                                                                                      540
                                                                                                                                              480
                                                                                                                                                                      480
                                                                                                                                                                                            420
                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                  600
                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
```

```
Š
                      В
                                    Qy
                                                            В
                                                                           Qy
                                                                                              DЬ
                                                                                                                   Qy
                                                                                                                                       DЬ
                                                                                                                                                         δÃ
                                                                                                                                                                                Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                 QΥ
                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                             ; ORGANISM: Candida albicans US-09-248-796-4351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Db
dg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                         US-09-248-796-4351
Sequence 4351, Application US/09248796
GENERAL INFORMATION:
APPLICANT: Keith Weinstock et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
FILLE REPERENCE: 107196,132
CURRENT APPLICATION NUMBER: US/09/248,796
CURRENT FILING DATE: 1999-02-12
NUMBER OF SEQ ID NOS: 28206
SEQ ID NO 4351
LENGTH: 1038
                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 1009; Conserv
                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
    361
                                                                                 241
                                                                                                    199
                                                             259
                                                                                                                       181
                                                                                                                                            139
                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              961
                                                                                                                                                                                   79
                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                        19
                                                                                                                                                                                                                                            ш
                             CGAACACACGATTTATTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTT
                                                                                                                                                  GATTTCAGTCTTCCACCACATTCAATCCATCGAGAAATTTTTATACTTAAAACTTTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGATATGATCGAAGTAAAAGAATAACTTCTAAAGAAATCTTACAATTAATGTTGGATTG
GCTAATGAAATTGAAGAAAAAGATATCAAATTATGGTTAAAATCAATGAGTTCAGGACTT
                                                        GTCACCAAATTGTATCGTTATGATTTGAGTCAATTGAGTGAAATTACAAAATATTGTAAA
                                                                                               ccacatccaaacataattgaatattttaatgatcttaaaatttgtgacgatattatatta
                                                                                                        CCACATCCAAACATAATTGAATATTTTAATGATCTTAAAATTTATGATGATGATGATTATTA
                                                                                                                                                                            atatatacggctattgataagtttaataacttaccagtatgtcttaaaatagttgatgaa
                                                                                                                                                                                       ATATATACGGCTATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAATAGTTGATGAA 120
                                                                                                                                                                                                                              ATGAAGTTGTCAGATTATTATATAGACAAGGAATTAATTTACAATAGTGCCATTTCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAAATTTCGGTACACCCAATTTAACTGATTTTGAAGATGAATTATTTTGTGAATAT
                   cgaacaacacgatttatttatggtattaatggtaatcttgttagtaatcaatatacactt
                                                                                                                                        gatttcagtcttccaccacattcaatccatcgagaagttcttatacttaaaactttgaaa
                                                                                                                                                                                                                    atgaagttgtcagattattatatagacaaggaattaatttacaatagtgccatttctgat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aataatgaaaacttgcattttaaaaaattcaatttacaaaaatatcctagaaaagattgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATAATGAAAACTTGCATTTTAAAAAATTCAATTTACAAAAATATCCCTAGAAAAGATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATAAAGAATTGACTAATGATTCTCATGTTAGTGATTTATATTTATATTAAATCAAATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gaaaatttcggtacacccaatttaactgattttgaagatgaattattttgtgatgaatat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                       98.4%;
99.0%;
                                                                                                                                                                                                                                                            Score 1003; DB 16;
Pred. No. 4.3e-156;
0; Mismatches 10;
                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                               1038;
                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1019
 420
                   378
                                      360
                                                                             300
                                                                                                 258
                                                                                                                                        198
                                                                                                                                                           180
                                                                                                                                                                               138
                                                                                                                                                                                                                     78
                                                                                                                                                                                                                                         60
                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                            0;
밁
               Ωy
                                     ₽
                                                    γQ
                                                                                                                                                                                                                                                                                                                                                                   QΥ
                                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                  Б
                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                              Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                           Query Match
Best Local S
Matches 1009
                                                                                                                                                                                                                                                                                                           979
                                                                                                                                                                                                                                                                                                                              961
                                                                                                                                                                                                                                                                                                                                                  919
                                                                                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                         859
                                                                                                                                                                                                                                                                                                                                                                                                                               799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       439
                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              379
79
                61
                                     19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
```

```
AGATATGATCGAAGTAAAAGAATAACTTCTAAAGAAATCTTACAATTAATGTTGGATTG 1019
                                                                                                                                                                                                                   GAAAATTTCGGTACACCCAATTTAACTGATTTTGAAGATGAATTATTTTTGTGAATGATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTAT
agatatgatcgaagttcaagaataacttctaaagaaatcttacaattaatgttggattg
                                                                                            AATAATGAAAACTTGCATTTTAAAAAATTCAATTTACAAAAATATCCCTAGAAAAGATTGG
                                                                                                                                                                                                                                                                                                               TTGGGTATAATTTTGACTGGTTTATATTCAGAAAATTTTCAAAGTGTTTTAGTCAAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAGCACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTGGTCA
                                                                          gatattattttacctcgatgcaatgatgatttcatgaaagatatttttaccaagatgatt
                                                                                                                                               aataatgaaaacttgcattttaaaaaattcaatttacaaaaatatcctagaagagattgg
                                                                                                                                                                                                                                                                                            aaagcaccagaattgattcttggtataactaattatgaatatgaaattgatatttggtca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCCGGGATGATATAACACAACCGATTATTGGAGATTTTGATATTTGTTATGATTTTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gcccgggatgatataacacaaccgattattggagattttgatatttgttatgatttaaaa
                                                                                                                                                                                                                                                                                                                                                                   ttgggtataattttgactggtttatattcagaaaattttcaaaagtgttttagtcaaagat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gaatttattcattcacaagggataattcatcgtgatataaaacccagtaatattttcttt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAATTTATTCATTCACAAGGGATAATTCATCGTGATATAAAACCCAGTAATATTTTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gctaatgaaattgaagaaaaagatatcaaattatggttaaaatcaatgagttcaggactt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1037
                                                                            978
                                                                                                                                                 918
                                                                                                                                                                                                                        858
                                                                                                                                                                                                                                                         840
                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                              798
                                                                                                                                                                                                                                                                                                                                780
                                                                                                                                                                                                                                                                                                                                                                                                                                            678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                   738
                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
```

```
US-60-096-409-4351
US-60-096-409-4351, Application US/60096409A

Sequence 4351, Application US/60096409A

REPLICANT: Keith Weinstock et al

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA /
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS

FILE REFERENCE: GTC-016P

CURRENT APPLICATION NUMBER: US/60/096,409A

CURRENT FILING DATE: 1998-08-13

NUMBER OF SEQ ID NO 4351

LENGTH: 1038

TYPE: DNA

ORGANISM: Candida albicans

US-60-096-409-4351
                                                                                                                                                                        Local Similarity
nes 1009; Conserv
ATATATACGGCTATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAATAGTTGATGAA 120
                                                                                                    ATGAAGTTGTCAGATTATTATATAGACAAGGAATTAATTTACAATAGTGCCATTTCTGAT
                                                                                atgaagttgtcagattattatatagacaaggaattaatttacaatagtgccatttctgat
                                                                                                                                                                      Conservative
                                                                                                                                                                                       98.4%;
                                                                                                                                                                   0;
                                                                                                                                                               Score 1003; DB 48;
Pred. No. 4.3e-156;
0; Mismatches 10;
                                                                                                                                                                                                          Length
                                                                                                                                                                   Indels
                                                                                                                                                                                                          1038;
                                                                                                                                                                 0;
                                                                                                                                                               Gaps
                                                                                   78
                                                                                                                         60
                                                                                                                                                                 0
```

```
RESULT 13
US-60-127-461-6643
; Sequence 6643, Application US/60127461
                                                                                                                                                                                                                                      Дb
                                                                                                                                                                                                                                                              Qγ
                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                   뫄
                                                                                                                                                                                                                                                                                                                                                                              δõ
                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . 문 양
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                       δõ
          GENERAL INFORMATION:
APPLICANT: Chapman, Rowan
APPLICANT: Thornton, Michael
TITLE OF INVENTION: NUCLEOTIDE SEQUENCES OF CANDIDA
TILE REFERENCE: PM-0007-2 P
CURRENT APPLICATION UNMERE: US/60/127,461
CURRENT FILING DATE: 1999-04-01
NUMBER OF
                                                                                                                                                                                    979
                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301 CGAACAACACGATTTATTTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 GATTTCAGTCTTCCACCACATTCAATCCATCGAGAAATTTTTATACCTTAAAACTTTGAAA
                                                                                                                                                                                                             AGATATGATCGAAGTAAAAGAATAACTTCTAAAGAAATCTTACAATTAATGTTGGATTG
                                                                                                                                                                                                                                                     AATAATGAAAACTTGCATTTTAAAAAATTCAATTTACAAAAATATCCTAGAAAAGATTGG
                                                                                                                                                                                                                                                                                                                                                                  GAAAATTTCGGTACACCCAATTTAACTGATTTTGAAGATGAATTATTTTGTGAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                          GATAAAGAATTGACTAATGATTCTCATGTTAGTGATTTATATATTATAAATCAAATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGGGTATAATTTTGACTGGTTTATATTCAGAAAATTTTCAAAGTGTTTTAGTCAAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAGCACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTTGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCCGGGATGATATAACACAACCGATTATTGGAGATTTTGATATTTGTTATGATTTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gaatttattcattcacaagggataattcatcgtgatataaaacccagtaatattttcttt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAATTTATTCATTCACAAGGGATAATTCATCGTGATAAAAACCCAGTAATATTTTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTAATGAAATTGAAGAAAAAGATATCAAATTATGGTTAAAATCAATGAGTTCAGGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cgaacaacacgatttatttatggtattaatggtaatcttgttagtaatcaatatacactt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCACATCCAAACATAATTGAATATTTAATGATCTTAAAATTTATGATGATGTTATATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gatttcagtcttccaccacattcaatccatcgagaagttcttatacttaaaactttgaaa
                                                                                                                                                                                 agatatgatcgaagttcaagaataacttctaaagaaatcttacaattaatgttggattg
                                                                                                                                                                                                                                       gatattattttacctcgatgcaatgatgatttcatgaaagatatttttaccaagatgatt
                                                                                                                                                                                                                                                                                              aataatgaaaacttgcattttaaaaaaattcaatttacaaaaatatcctagaagagattgg
                                                                                                                                                                                                                                                                                                                                                     gaaaatttcggtacacccaatttaactgattttgaagatgaattattttgtgatgaatat
                                                                                                                                                                                                                                                                                                                                                                                                             aaagcaccagaattgattcttggtataactaattatgaatatgaaattgatatttggtca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ctgccacctaaagatgaaccccctatggcgaaatatattgatgtatctacaggtatttat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gcccgggatgatataacacaaccgattattggagattttgatatttgttatgatttaaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gctaatgaaattgaagaaaaagatatcaaattatggttaaaatcaatgagttcaggactt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NOS:
                                                      ALBICANS
                                                                                                                                                                                  1037
                                                                                                                                                                                                             1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                         978
                                                                                                                                                                                                                                                                     960
                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                      858
                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                             798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                918
                                                                                                                                                                                                                                                                                                                                                                                                                                         780
```

```
Вb
                                                                                                 QΥ
                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
Š
                         B
                                                Ş
                                                                                                                                                     δÃ
                                                                                                                                                                                                                                               ; OTHER INFORMATION: ZSY808579310 US-60-127-461-3655
                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-60-127-461-3655; Sequence 3655, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: US-60-127-461-6643
                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: NUCLEOTIDE SEQUENCES OF FILE REFERENCE: PM-0007-2 P CURRENT APPLICATION NUMBER: US/60/127,461 CURRENT FILING DATE: 1999-04-01 NUMBER OF SEQ ID NOS: 8247 SOFTWARE: PERL PROGRAM SEQ ID NO 3655 LENGTH: 262
                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Chapman, Rowan
APPLICANT: Thornton, Mich
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PERL Program SEQ ID NO 6643 LENGTH: 262
                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 262; Conserv
                                                                                                                                                                                Matches 261;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo s
FEATURE: -
                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: HOMO
FEATURE: -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        492 TATAACACAACCGATTATTGGAGATTTTGATATTTTTATGATTTTAAAACTGCCACCTAA
 786
                         121
                                                                                                   999
                                                                                                                                         606 ACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTTGATATTTTGGTCATTTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241 gactaatgattctcatgttagt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  732 GACTAATGATTCTCATGTTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                            61
                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ш
                                                                                       TATAATTTTGACTGGTTTATATTCAGAAAATTTTCAAAGTGTTTTAGTCAAAGATGATAA 725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    attgattcttggtataactaattatgaatatgaaattgatatttggtcattgggtataat
 TTTCGGTACACCCAATTTAACTGATTTTGAAGATGAATTATTTTGTGATGAATATAATAA
                         tataattttgactggtttatattcagaaaattttcaaaagtgtttttagtcaaagatgataa
                                                                                                                             accagaattgattcttggtataactaattatgaatatgaaattgatatttggtcattggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTGGTCATTGGGTATAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tataacacaaccgattattggagattttgatatttgttatgatttaaaaactgccacctaa
                                                Application US/6012746:
                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                   Michael
                                                                                                                                                                                             25.6%;
99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25.7%;
                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 262; DB 51;
Pred. No. 7.9e-34;
                                                                                                                                                                                             Score 260.4; DB 5
Pred. No. 1.5e-33;
                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                       DB 51;
                                                                                                                                                                                                                                                                                                                                                                                                      CANDIDA ALBICANS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                         Length
                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                           180
                                                   785
                                                                            120
                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                0;
```

```
Sequence 6591, Application US/60127461

GENERAL INFORMATION:

APPLICANT: Chapman, Rowan

APPLICANT: Thornton, Michael

TITLE OF INVENTION: NUCLEOTIDE SEQUENCES OF CANDIDA ALBICANS

FILE REFERENCE: PM-0007-2 P

CURRENT APPLICATION UNUMBER: US/60/127,461

CURRENT FILING DATE: 1999-04-01

NUMBER OF 58Q ID NOS: 8247

SOFTWARE: PERL Program

SEQ ID NO 6591

LENGTH: 260

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

COTHER INFORMATION: ATTERNOSCIONS

FEATURE:
                                                                          р. <sub>О</sub>у
                                                                                                                                                                                 Дb
Search completed: May 29, 2002, 14:50:37 Job time: 17726 sec
                                                                                                                              밁
                                                                                                                                                      ρy
                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                       Ωy
                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: ATF808591828 US-60-127-461-6591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15
US-60-127-461-6591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                       Query Match 25.3%; Score 258; DB 51; Length 260; Best Local Similarity 100.0%; Pred. No. 3.6e-33; Matches 258; Conservative 0; Mismatches 0; Indels
                                                                                     732 GACTAATGATTCTCATGT 749
                                                                                                                                        672 TTTGACTGGTTTATATTCAGAAAATTTTCAAAGTGTTTTTAGTCAAAGATGATAAAGAATT 731
                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       846 TGAAAACTTGCATTTTAAAAAA 867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 tgaaaacttgcattttaaaaaa 262
                                                                                                                         tttgactggtttatattcagaaaattttcaaagtgttttagtcaaagatgataaagaatt 240
                                                                     gactaatgattctcatgt 258
                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                          0;
```

7 44			

```
Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         No
         on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No.
       51.4
51.4
51.4
51.4
50.8
50.6
                                                                                                                                                                                     556.2
554.2
53.8
53.8
53.6
53.6
                                                                                                                                                                                                                                                                                                                                                                                                                                              61.8
59.6
59.4
                                                                                                                                                                                                                                                                                                                                                                         58
58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         No. is the number of results predicted by chance to have a greater than or equal to the score of the result being printed, serived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Issued_Patents_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         May 29, 2002, 09:55:12; Search time 66.37 Seconds (without alignments) 3771.290 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                383533 seqs, 122816752 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-072-994A-13
1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GenCore version 4.5
Copyright (c) 1993 - 2000 Comp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGAAGTTGTCAGATTATTA.....TTACAATTAATGTTGGATTG
       /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6A_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/BCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length DB
       828
834
665
19124
636
8920
8920
8920
767
724
860
837
663
19124
1070
837
51952
2483
2483
2483
2483
5203
5203
5203
5203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    80
US-08-998-416-186
US-09-316-083-2
US-09-998-416-305
US-08-998-416-305
US-08-883-795A-36
US-08-883-795A-36
US-08-487-826B-13
US-08-98-416-137
US-08-98-416-472
US-08-998-416-287
US-08-998-416-287
US-08-998-416-288
US-08-998-416-288
US-08-998-416-288
US-08-998-416-288
US-08-98-416-288
US-08-946-617-1
US-09-031-897-1
US-09-031-897-1
US-09-316-08-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Compugen Ltd
                 Sequence
Sequence
                                                   Sequence
Sequence
Sequence
Sequence
                                                                                                                                             Sequence
Sequence
                                                                                                                                                                                                 sequence
sequence
sequence
sequence
sequence
sequence
                                                                                                                                                                                                                                                                                                              Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description
   Sequence
                                                                                                                            Sequence
                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                               .e 186, A.
2, Appli
3, App
                                                                                                                                             13, Appl
5, Appli
288, App
                                                                                                                                                                                                 36, Appl

3, Appl

13, Appl

1137, Ap

1, Appli

1, Appli

1, Appli

472, App

683, App

683, App

288, App

288, App

288, App

191, App
   1, A, 1, A, 2, A, 1, A, 
                                                                                                                                                                                                                                                                                                                                                                                                                       2, Ar
538,
305,
                                                                                         5,1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1019
                                Appli
Appli
Appli
Appli
Appli
Appli
Appli
```

O	a					C	C	C	O	O	O	C				a	O
45	44	43	42	41	40	39	38	37	36	35	34	ω	32	31	30	29	28
48.8	48.8	48.8	49	49	49	50	50	50.2	50.2	50.2	50.4	50.4	50.4	50.4	50.4	50.4	50.6
4.8	4.8	4.8	4.8	4.8	4.8	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	5.0
1395	827	636	1511	1511	1511	854	701	732	665	662	8920	8920	6124	3974	2317	711	6124
۳	4	4	N	<u> </u>	Н	4	4	4	4	4	4	N	4	4	ω	4	4
US-07-991-867B-25	US-08-998-416-535	US-08-998-416-1137	US-08-544-332-8	US-08-107-755A-8	US-07-991-867B-8	US-08-998-416-534	US-08-998-416-701	US-08-998-416-1036	US-08-998-416-937	US-08-998-416-185	US-09-150-741-1	US-08-446-855A-1	US-08-213-419B-3	US-08-467-504-3	US-08-749-522-5	US-08-998-416-786	US-08-213-419B-3
25,						Sequence 534, App					Sequence 1, Appli	μ,	Sequence 3, Appli	ω	5, Ap	786	Sequence 3, Appli

ALIGNMENTS

```
RESULT 1
US-08-998-416-186/c
; Sequence 186, Application
; Patent No. 6239264
                                                                        TELEPAX: 919-541-8000 INFORMATION FOR SEQ ID NO: 1/
SEQUENCE CHARACTERISTICS:
LENGTH: 615 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                 MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                            REFERENCE/DOCKET NUMBER: PETELECOMMUNICATION INFORMATION: 919-541-8587
                                                                                                                                                                                                                                  APPLICATION NUMBER: CH 00 FILING DATE: 31-DEC-1996 ATTORNEY/AGENT INFORMATION: NAME: Meigs, J. Timothy REGISTRATION NUMBER: 38,7
                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/998,410
FILING DATE: 24-DEC-1997
                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE. Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Rebischung, Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
TITLE OF INVENTION: AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                          TELEPHONE: 919-541-8689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: No. 6239264artis Corporation STREET: 3054 Cornwallis Road CITY: Research Triangle Park STATE: No. 6239264th Carolina
                                                                  TYPE: nucleion STRANDEDNESS:
                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wendland, Jurgen
Knechtle, Philipp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pohlmann, Rainer
Steiner, Sabine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mohr, Christine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Philippsen,
                                                     linear
PAG1074RF
                                DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                               UMBER: US/08/998,416
24-DEC-1997
                                                                  single
                                                                                                                                                                                                                                                                                                          CH 0016/97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US/08998416
                                                                                                                                                                                                                                38,241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Peter
                                                                                                                                                                                                               PF/5-30306/A/CGC1976
                                                                                                                                                                                                                                                                                                                                                                                                                      Version #1.30
```

O

O

o

o o

0 0 0

a

o o

452

332

311

272

```
Ϋ́O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멅
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
Qy
                                                                                                                                                                                                                                                                                                                                                                                                      US-09-316-083-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-998-416-186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 241; Conserv
                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application US/09316083A Patent No. 6280942
                                                                                                                                                                                                           SOFTWARE: PatentIn
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                           Query Match
Best Local
                                                                                                      FEATURE:
NAME/KEY: CDS
LOCATION: (1)..(1428)
-09-316-083-2
                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/316,083A CURRENT FILING DATE: 1999-05-20 EARLIER APPLICATION NUMBER: JP98/141861 EARLIER FILING DATE: 1998-05-22 NUMBER OF SEQ ID NOS: 38
                                                                                                                                                                                                                                                                                                                APPLICANT: The Institute of Physical and Chemical TITLE OF INVENTION: Endonuclease FILE REFERENCE: PH-651
                                                                                                                                                                LENGTH: 1431
TYPE: DNA
ORGANISM: Saccharomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             576 TATTGATGTATCTACAGGTATTTATAAAGCACCAGAATTGATTCTTGGTATAACTAATTA 635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            516 TTTTGATATTTGTTATGATTTAAAACTGCCACCTAAAGATGAACCCCCTATGGCGAAATA 575
                               Local Similarity nes 376; Conserv
   TAATCAAATAATTAATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAAAGAAATCTTACAATTAAT 1010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAATTTACAAAAATATCCTAGAAAAGATTGGGATATTATTTTACCTCGATGCAATGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTATATTTATTAAATCAAATATTTGAAAATTTCGGTACACCCAATTTAACTGATTTTGA 815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGATTCTCATGTTAGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTAAAATTAATTTTAATAATAATTCTTATAAAAAGTTAAATAATAATAAATCAACATAATA 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGAATATGAAATTGATATTTGGTCATTGGGTATAATTTTGACTGGTTTATATTCAGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTAATGAAAGAAATTTTTACCAAGATGATTAGATATGATCGAAGTAAAAGAATAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -AATTTAAAATTTGAACATAGACTAAATAGTATTCATATTAAATATTATTTTTATAATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATAATCTATTTAATAATTTATTAAAGAAAATAATATATCTAATAATATTTTAATAACT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGA----TGAATTATTTTGTGATGAATATAATAATGAAAACTTGCATTTTAAAAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                Conservative
                                                                                                                                                                                                                            Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6.1%;
48.1%;
                                             5.8%;
43.7%;
                                                                                                                                                                                                                              2.0
                                                                                                                                                                    cerevisiae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 61.8; DB 4;
Pred. No. 0.0002;
0; Mismatches 252;
                             Score 59.6; DB 4;
Pred. No. 0.00061;
D; Mismatches 469;
                                                                                                                                                                                                                                                                                                                                                 Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 615;
                                                           Length 1431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                Indels
                                15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     478
   71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2;
                                2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               멍
                                                                                                                                                                   RESULT 3
US-08-998-416-538/c
                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                               Вþ
                                                                                                                                                                                                                                                                                                                                                                          ρy
                                                                                                                                                                                                                                                                                                                                                                                                            멍
                                                                                                                                                                                                                                                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                     Sequence 538, Application US/08998416 Patent No. 6239264
                                                                                                                      GENERAL INFORMATION:
                               APPLICANT:
APPLICANT:
                                                           APPLICANT:
APPLICANT:
APPLICANT:
   TITLE OF
                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           132
                                                                                                                                                                                                                               918
                                                                                                                                                                                                                                                                                                                     792
                                                                                                                                                                                                                                                                                                                                                 798
                                                                                                                                                                                                                                                                                                                                                                             732
                                                                                                                                                                                                                                                                                                                                                                                                          741
                                                                                                                                                                                                                                                                                                                                                                                                                                        672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ggataattataataataataataatatattcattaaaatatataatgaattattaaaaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATAATTGAATATTTTAATGATCTTAAAATTTATGATGATGTTATATTAGTCACCAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCACCACATTCAATCCATCGAGAAATTTTTATACTTAAAACTTTTGAAAACCACATCCAAA 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGAAGAAAAAGATATCAAATTATGGTTAAAATCAATGAGTTCAGGACTTGAATTTATTCA 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTATCGTTATGATTTGAGTCAATTGATTGAAATTACAAAATATTGTAAACGAACAACACG
                                                                                                                                                                                                                               attacctattaaaaatatta
                                                                                                                                                                                                                                                          CTTGCATTTTAAAAAATTCA
                                                                                                                                                                                                                                                                                                       GACTAATGATTCTCATGTTAGTGATTTATATTTAATTAAATCAAATATTTGAAAATTTCGG
                                                                                                                                                                                                                                                                                                                                                                                                         gatggatactttaaa---agataatccttattttgttaatgctttctctattaatattaa
                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTGACTGGTTTATATTCAGAAAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tgtattaaatactatctttattaataaaagaattaaaaatagtattttagtagaaaaatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTGATTCTTGGTATAACTAATTATGAATATGAAATTTGATATTTTGGTCATTGGGTATAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aattgaaggtgatggttatattggtcctggaggtattacaattactaatcatgctaatga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTATAAAAGCACCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aaatattaaaacagtattagatttaaataataatgaattttatgattatttatcagggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATAACACAACCGATTATTGGAGATTTTGATATTTGTTATGATTTAAAAACTGCCACCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCACAAGGGATAATTCATCGTGATATAAAACCCAGTAATATTTTCTTTGCCCGGGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tattatgaataatttaaaattataaaacttctaatattgaaactaatttatctaataattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTTATTTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTTGCTAATGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tatggattataaattattatatacttatttttatattttaaattaaaatgaaaatggaaat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            {\tt taactatcataaacaacgtacacctatgtctaataaaagattaatgaattcaaaaaatat}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAATAGTTGATGAAGATTTCAGTCT
                                                                                                                                                                                                                                                                                         ttatttaatggataaatatttaattaataaatatatga-----aatatttaga
    INVENTION:
                                                           Philippsen, Peter
Pohlmann, Rainer
Steiner, Sabine
Mohr, Christine
Wendland, Jurgen
Knechtle, Philipp
Rebischung, Corinne
LNVENTION: GENOMIC DNA S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                =
=
=
=
=
=
                                                                                                                                                                                                                               937
                                                                                                                                                                                                                                                           871
    SEQUENCES
    OF ASHBYA GOSSYPII
```

851 857 791

917

731

740

671

AND USES THEREOF

```
밁
                                δõ
                                                                   밁
                                                                                                ρy
                                                                                                                                    В
                                                                                                                                                                    Š
                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                            DЬ
                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                            Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                  당, 양
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-998-416-538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 919-541-8689 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 828 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: CH 0016/97
FILING DATE: 31-DEC-1996
ATTORNEY/AGENT INFORMATION:
NAME: Melgs, J. Timothy
REGISTRATION NUMBER: 38,241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: 919-541-8587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                  632 ATTATGAATATGAAATTGATATTTGGTCATTGGGGTATAATTTTGACTGGTTTATATTCAG 691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
NUMBER OF SEQUENCES:
332 ATAATCTATTTATTAATAAAAATGGTATATT
                                                                                                                                                                                                                         812 TTGAAGATGAATTATTTTGTGATGA----ATATAATGAAAACTTGCATTTTAAAAAA 867
                                                                                                                                                                                                                                                                      572 TTAATTTATATACTTTAGATAATAAATTATTAGATTTAAGTATTCTTAATAATATATTAT
                                                                                                                                                                                                                                                                                                                                           692 ATAATTATTAATAAATTACCATTTAATAATGATATTATTATTATCAAAAAATTATGTTATA 633
                                                                                                                                                                                                                                                                                                752 GTGATTTATATTAATCAAATATTTGAAAATTTCGGTACACCCAATTTAACTGATT 811
                                                                                                                                                                                                                                                                                                                                                                              692 AAAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGATTCTCATGTTA 751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
nes 191; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 3054 Cornwallis Road
CITY: Research Triangle Park
STATE: No. 6239264th Carolina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF/5-30306/A/CGC1976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/998,416 FILING DATE: 24-DEC-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                 TAGGTAAATATTTAGTAGGTAGTAATATCCAATTAAAGGGTAGACTATTAAATAGAAATA 453
                                TCTAAAGAAATCTTACAATTAATGTTGGATT 1018
                                                                                              GATTTAATGAAAGAAATTTTTACCAAGATGATTAGATATGATCGAAGTAAAAGAATAACT 987
                                                                                                                                                                   TTCAATTTACAAAAATATCCTAGAAAAGATTGGGATATTATTTTACCTCGATGCAATGAT 927
                                                               27709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAG1375RP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6239264artis Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5.8%;
48.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               538:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 59.4; DB 4;
Pred. No. 0.00063;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Version #1.30
302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   196;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 828;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                        513
                                                                                                                                                                                                                                                                                                                                             573
```

1;

```
Qγ
                                                                                                  Qy
                                                                                                                                        DЬ
                                                                                                                                                                                                             밁
   В
                                                                       밁
                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                     US-08-998-416-305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-998-416-305/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
                                                                                                                                                                                                                                                                           Query Match 5.8%;
Best Local Similarity 48.8%;
Matches 190; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 305, Application US/08998416 Patent No. 6239264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 24-DEC-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: CH 0016/97
FILING DATE: 31-DEC-1996
ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 919-541-8689
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
ORIGINAL SOURCE:
ORGANISM: PAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-541-8587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Rebischung, Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPTI
TITLE OF INVENTION: AND USES THEREOF
NUMBER OF SEQUENCES: 1152
                                                                                                                                          629
                                                                                                                                                                                                    634 TATGAATATGAAATTGATATTTGGTCATTGGGTATAATTTTGACTGGTTTTATATTCAGAA 693
                                                                        569
                                                                                                                                                            694 AATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGATTCTCATGTTAGT 753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                754 GATTTATATTTAATTAAATCAAATATTTGAAAATTTCGGTACACCCAATTTAACTGATTTT 813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Meigs, J. Timothy REGISTRATION NUMBER: 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: U
ZIP: 27709
                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 834 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
                       GAAGATGAATTATTTGTGATGA----ATATAATAATGAAAACTTGCATTTTAAAAAATT 869
                                                                                                                                     GGTAAATATTTAGTAGGTAGTAATATCCAATTAAAGGGTAGACTATTAAATAGAAATATT
                                                                   AATTTATATACTTTAGATAATAAATTATTAGATTTAAGTATTCTTAATAATATATTATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         r: 3054 Cornwallis Road
Research Triangle Park
: No. 6239264th Carolina
                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleic acid
EDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NO.
USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pohlmann, Rainer
Steiner, Sabine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mohr, Christine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wendland, Jurgen
Knechtle, Philipp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Philippsen,
                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                       PAG1250RP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            No. 6239264artis Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                      DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/08/998,416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             38,241
BER: PF/5-30306/A/CGC1976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peter
                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                           Score 59; DB 4; Length 834; Pred. No. 0.00075; Indels 0; Mismatches 195; Indels
                                                                                                                                                                                                                                                                           4.
                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                      570
450
                                                                 510
```

1;

```
В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
δõ
                                   망
                                                                δÃ
                                                                                                       В
                                                                                                                                      Qy
                                                                                                                                                                                                                                                                  US-08-883-795A-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-883-795A-36/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 36, Application US/08883795A Patent No. 5985607
                                                                                                                                                                           Query Match
Best Local Similarity
Matches 178; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (416) 361-13
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/883,795A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Recombinant DNA Molecules and Expression TITLE OF INVENTION: Vectors for Tissue Plasminogen Activator
                                                                                                                                                                                                                                                                                   IMMEDIATE SOURCE: CLONE: Rh 32
                                                                                                                                                                                                                                                                                                                                    ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 665 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Gravelle, Micheline
REGISTRATION NUMBER: 40,26
REFERENCE/DOCKET NUMBER: 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Delcuve, GenevappLICANT: Awang, Gregor
 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 40 Kin CITY: Toronto STATE: Ontario
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  329 AATCTATTATTAATAAAAATGGTATATT 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               990 TAAAGAAATCTTACAATTAATGTTGGATT 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      930 TTTAATGAAAGAAATTTTTACCAAGATGATTAGATATGATCGAAGTAAAAGAATAACCTTC 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          870 CAATTTACAAAAATATCCTAGAAAAGATTGGGATATTATTTTACCTCGATGCAATGATGA 929
                                   404 TTATAAACATTTTAATTATAAAATATGTAATTATAAACATTTTAATTATAAAATATGTAA 345
                                                                                                         464 TTATAAAATATGTAATTATAAAATATGTAATTATAAACATTTTAATTATAAAATATGTAA 405
                                                                      75
                                                                                                                                        15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 27-JUN-1997
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                      ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: M5H 3Y2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
ACCACATTCAATCCATCGAGAAATTTTTATACTTAAAACTTTGAAACCACCACCATCCAAACAT 194
                                                                    TGATAAGTTTAATAACTTACCAGTATGTCTTAAAAATAGTTGATGAAGATTTCAGTCTTCC 134
                                                                                                                                        nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ontario
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E: BERESKIN & PARR
40 King Street West
                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (416) 361-1398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Canada
                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (416)
                                                                                                                                                                                                                                                                                                                                                         CDNA
                                                                                                                                                                                                                                                                                                                                                                                      single
                                                                                                                                                                                            5.8%;
47.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 364-7311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genevieve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40,261
BER: 7841-062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                36:
                                                                                                                                                                         Score 58.6; DB 2;
Pred. No. 0.00088;
0; Mismatches 199;
                                                                                                                                                                                                              Length 665;
                                                                                                                                                                           Indels
                                                                                                                                                                           0;
                                                                                                                                                                         Gaps
                                                                                                                                                                           0;
```

```
RESULT 6
US-08-883-795A-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                US-08-883-795A-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent No. 5985607
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 36, Appr. 5985607
   Matches
             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                      TELEFAX: (416) 361-13
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/08/883,795A
FILING DATE: 27-JUN-1997
                                                                                              IMMEDIATE SOURCE:
CLONE: Rh 32
                                                                                                                                            ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Delcuve, GenevappLICANT: Awang, Gregor
                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: (416) 364-7311
                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 3
                                                                                                                                                            MOLECULE TYPE:
                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Recombinant DNA Molecules and Expression TITLE OF INVENTION: Vectors for Tissue Plasminogen Activator
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    195 AATTGAATATTTTAATGATCTTAAAATTTATGATGATGATGTTATTATTAGTCACCAAATTGTA 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              104 TTATAAATATTTTAATT 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       315 TATTTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACTTGCTAATGAAATTGA 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  344 TTATAAACATTTTAATTATAAAATATGTAATTATAAACATTTTAATTATAAAAATATTTAA 285
                                                                                                                                                                           TOPOLOGY: lir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 40 Kir
CITY: Toronto
                                                                                                                               ORGANISM:
                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                  NAME: Gravelle, Micheline REGISTRATION NUMBER: 40,2
                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
                                                                                                                                                                                                                        LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCGTTATGATTTGAGTCAATTGATTGAAATTACAAAATATTGTAAACGAACAACACGATT 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGAAAAAGATATCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'RY: Canada
M5H 3Y2
                                                                                                                                                                                                           nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ontario
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/08883795A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40 King Street West
                                                                                                                                                                                                                        665 base pairs
                                                                                                                                                                                                                                                                     (416) 361-1398
 Conservative
                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BERESKIN & PARR
                                                                                                                                                              CDNA
                                                                                                                                                                                          single
              5.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Genevieve
                                                                                                                                                                                                                                                                                                           ner....
: 40,261
: 7841-062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          391
                                                                                                                                                                                                                                                         36:
 0;
Score 58.2; DB 2;
Pred. No. 0.0011;
0; Mismatches 283;
                               Length 665;
   Indels
   <u>ن</u>
 Gaps
   2
```

QΥ

4 AAGTTGTCAGATTATTATATAGACAAGGAATTAATTTACAATAGTGCCATTTCTGATATA 63

Gaps

9

```
ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 7
US-08-487-826B-13/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 13, Application US/08487826B Patent No. 5993827
         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Vers
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/487,826B
FILING DATE: 10-SEP-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: ISTAGLISEN, Ned
REGISTRATION NUMBER: 29,655
                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                           APPLICANT: Sim, Kim L.
APPLICANT: Chitnis, Chetan
APPLICANT: Miller, Louis H.
APPLICANT: Peterson, David S
APPLICANT: Su, Xin-zhaun
APPLICANT: Wellems, Thomas E
                                                                                                                                                                                                                                                                 APPLICANT: Su, Xin-zhaun
APPLICANT: Wellems, Thomas E.
TITLE OF INVENTION: BINDING DOMAINS FROM PLASMODIUM VIVAX
TITLE OF INVENTION: AND PLASMODIUM FALCIPARUM ERYTHROCYTE
NUMBER OF SEQUENCES: 45
CORRESPONDENCE ADDRESS:
                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64
                                                                                                                                                                                                           ADDRESSEE: Knobbe Martens Olson & Bear STREE: 620 Newport Center Drive 16th CITY: Newport Beach STATE: California
                                                                                                                                                                                      ZIP: 92660
                                                                                                                                                                                                  COUNTRY:
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATCCAAACATAATTGAATATTTTAATGATCTTAAAAATTTATGATGATGTTATATTAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATACGGCTATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAATAGTTGATGAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATT 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTTTATAATTAAAGTATTTATAATTACATATTTATAATTAAAGTATTTATAATTACAT 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCCCGGGATGATATAACACAACCGATTATTGGAGATTTTTGATATTTTGTTATGATTTAAA 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAATGTTTATAATTACATATTTTATAATTACATATTTTATAAAGTATTTATAATTACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAATTTATTCATTCACAAGGGATAATTCATCGTGATATAAAACCCAGTAATATTTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATGAAATTGAAGAAAAGATATCAAATT----ATGGTTAAAATCAATGAGTTCAGGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAATGTTTATAATTACATATTTATAATTAAAATGTTTATAATTACATATTTATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAACACGATTTATTGTATTGATTAATGGTAATCTTGTTAGTAATCAATATACACTTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAATATTTATAATTAAATATTTATAATTAAATGTTTATAATTAAATATTTATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCAAATTGTATCGTTATGATTTGAGTCAATTGATTGAAATTACAAAATATTGTAAACGA 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCAGTCTTCCACCACATTCAATCCATCGAGAAATTTTTATACTTAAAACTTTGAAACCA 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGATGAGGTAATTGTGTTTTTATAATTAATTATTATAATTAAATATTTATAAATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAATGTTTATAATTACATATTTATAATTAAAATGTTTATAATTACATATTTATAATT
                                                                                                                                                                                                                                                                                                                                                           Peterson, David S.
NIH121.001CP1
                                                                                                                                                                                                                                           Floor
                                                                                                                                                                                                                                                                                                  BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63
                                                                                                                                                                                                                                                                                                  PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2
            γo
                                                                 Š
                                                                                              밁
                                                                                                                        Qy
                                                                                                                                                     В
                                                                                                                                                                                 Ş
                                                                                                                                                                                                              В
                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
            780
```

```
; ANTI-SENSE: US-08-487-826B-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 5.7%;
Best Local Similarity 45.2%;
Matches 464; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 235-8550
TELEPAX: (619) 235-0176
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: CI
                                                           6481
                                                                                                                                                                                                                                                                                                                                                                                                                                                              6775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7015
                                                                                                                                                                                                                                                                                                     6655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
-----TGAAAATTTTCGGTACACCCAATTTAACTGATTTTTGAAGATGAATTATTT----TGT
                                                           CAAAAAAAAATGATAAATAAATAACAGGAAAAATATATTATTATTATTATTATTAT
                                                                                                                                                                                                                                                                                                   ACTGCCACCTAAAGATGAACCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTA 599
                                                                                                                                                                                                                                                                                                                                                                                                                      TGCCCGGGATGATATAACACAACCGATTATTGGAGATTTTGATATTTGTTATGATTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGAATTTATTCATTCACAAGGGATAATTCATCGTGATATAAAACCCCAGTAATATTTTCTT 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACGAACAACACGATTTATTTATGGTATTAATGGTAATCTTGTTAGTAATCAATATACACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTAATAGTTGTACTATTATAATATTACAATATATGTATATGTTAAAAAAATAATATTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAGTCTTCCACCACCATTCAATCCATCGAGAAATTTTTATACTTAA-----AACTTTGAA 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATACGGCTATTGATAAGTTTAATAACTTACCAGTATGTCTTAAAATAGTTGATGAAGATT 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTTGTCAGATTATTATATAGACAAGGAATTAATTTACAATAGTGCCATTTCTGATATAT 64
                                                                                     ATTGGGTATAATTTTGACTGGTTTATATTCAGAAATTTTCAAAGTGTTTTAGTCAAAGA
                                                                                                                                                                                                                      ATTGATATAGATACATATTCTTTGTATTGTTGTATTATATTAAAAAGTAGTATATT-----
                                                                                                                                                                                                                                                                                                                                                                                TGACTTTATTTTAATTTATATATATATATATATATTAGAGATAACAAAAGAGACAAATA 6656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCTAATGAAATTGAAGAAAAAGATATCAAATTATGGTTAAAATCAATGAGTTCAGGACT 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCACATCCAAACATAATTGAATATTTTAATGATCTTAAAATTTATGATGATGTTATATT 239
                                                                                                                                                                                                                                                        TAAAGCACCAGAATTGATTCTTGGTATAACTAATTATGAATATGAAATTGATATTTGGTC 659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 58.2; DB 2;
Pred. No. 0.0016;
0; Mismatches 543;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 19124;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20;
```

7016

6956

719

831 6422 779 6597

539

6716

6836

43.4%;

Indels

0;

Gaps

0;

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-998-416-1137/c
US-08-998-416-1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1137, Application US/08998416 Patent No. 6239264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                       TELEFAX: 919-541-8689
NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6182
                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/998,416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Knechtle, Philipp
APPLICANT: Rebischung, Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUI
TITLE OF INVENTION: AND USES THEREOF
NUMBER OF SEQUENCES: 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                       SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           832
                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: CH 0016/97 FILING DATE: 31-DEC-1996
                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
                                                                                    STRANDEDNESS:
                  ORGANISM:
                                                                                                                                                                                        TELEPHONE:
                                                                                                                       ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTAAAGT 6176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAAATATTTGTTATAATAAAATACATATAT-GCTACTATATAAATATTAATAATATCT 6183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGATGATTAGATGATCGAAGTAAAAAGAATAACTTCTAAAGAAATCTTACAATTAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATGAATTTCAAAATTTTATTGTATAATATAAAAAAATAAGTAAAAATACACATTATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGGATT 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATGAATATAATGAAAACTTGCATTTTAAAAAATTCAATTTACAAAAATATCCTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Research Triangle Park
: No. 6239264th Carolina
                                                                                                 nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3054 Cornwallis Road
esearch Triangle Park
                                                                                                                       636 base pairs
                                                                                                                                                                       919-541-8689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rebischung, Corinne
VENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pohlmann, Rainer
Steiner, Sabine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Wendland, Jurgen
Knechtle, Philipp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mohr, Christine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Philippsen, Peter
                  PAG1692RP
                                                                  linear
                                                                                                                                                                                           919-541-8587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          No. 6239264artis Corporation
                                              DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                24-DEC-1997
                                                                                    single
                                                                                                                                                           1137:
                                                                                                                                                                                                                            PF/5-30306/A/CGC1976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               891
```

Query Match

5.6%;

Score 57;

DВ 4

Length 636;

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뮹
                                                                                                                                                                                                                                                                                    RESULT 9
US-08-446-855A-1
                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                     Дb
                                                                                                                                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 261; Conserv
                                                                                                                                                                                                                                                        Sequence 1, Approximately No. 5849573
                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                            APPLICANT:
APPLICANT:
          COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.24 CURRENT APPLICATION DATA:
                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                        TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      333 TAATCTTGTTAGTAATCAATATACACTTGCTAATGAAATTGAAGAAAAAGATATCAAATT 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  453
                                                                                                                                                                                                                                                                                                                                                             873 T 873
                                                                                                                                                                                                                                                                                                                                                                                                             813
                                                                                                                                                                                                                                                                                                                                                                                                                                      122
                                                                                                                                                                                                                                                                                                                                                                                                                                                            753
                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 22201-4714
                                                                                                              STATE:
                                                                                                                        CITY: Arlington
                                                                                                                                    STREET:
                                                                                             COUNTRY:
                                                                                                                                                  ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                      N
APPLICATION
                                                                                                                                                                                                                                                                                                                                      T 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGATTCTCATGTTAG 752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATTGATAATCTATTTAATAATTTATTAAAGAAAATAATAATAATATCTAATAATATTTTAAT 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATATATTGATGTATCTACAGGTATTTATAAAGCACCAGAATTGATTCTTGGTATAACTAA 632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGATTTTGATATTTATGATTTAAAACTGCCACCTAAAGATGAACCCCCCTATGGCGAA 572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGATATAAAACCCAGTAATATTTTCTTTGCCCCGGGATGATATAACACAACCGATTATTGG 512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAAGATGAATTATTTTGTGATGAATATAATAATGAAAACTTGCATTTTAAAAAATTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                   TGATTTATATTTAAATCAAATATTTGAAAATTTCGGTACACCCAATTTAACTGATTT 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTATGAATATGAAATTGATATTTGGTCATTGGGTATAATTTTGACTGGTTTATATTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACTAATTTAAAATTTGAACATAGACTAAATAGTATTCATATTAAATATTTTTTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/08446855A
                                                                                                            Virginia
                                                                                                                                      1100 No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                 USA
                                                                                                                                                                                                  Stewart, Thomas S
Flores, Maria V
O'Sullivan, William J
QUENTION: Nucleotide sequence encoding carbamoyl
                                                                                                                                     Nixon & Vanderhye PC
00 No. 5849573th Glebe
NUMBER:
                                                                                                                                                                                     phosphate synthetase
 US/08/446,855A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. 0.0018;
                                                                                                                                        Road,
                                                                                                                                        8th
                                                                                                                                        Floor
                                                                                                                                                                                                                                                                                                                                                                                                                872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      363
                                                                                                                                                                                                                                                                                                                                                                                                                                         63
```

```
Qγ
                                           밁
                                                                       Qy
                                                                                                           뫄
                                                                                                                                     QΥ
                                                                                                                                                                       В
                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                            δõ
                                                                                                                                                                                                                                                                                                 Ъ
                                                                                                                                                                                                                                                                                                                               δ. B
                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Дδ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TOPOLOGY: linear; MOLECULE TYPE: genomic US-08-446-855A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 703-816-4100 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 8920 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 29.009
REFERENCE/DOCKET NUMBER: 47-80
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5914 CCCTGGTAATTCTTATTATGTTGTAGATTCCGTATATAATAATGAATACAAAATTAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5854 AGGGAATAATAAAAATATGGATATGTATTTATCTAAGGAAAAAGTATATCTAATAAAAA 5913
864 AAA 866
||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION: NAME: Mitchard, Leonard
                                                                                                                                                                                                                                                                                                                  564 TATGGCGAAATATATTGATGTATCTACAGGTATTTATAAAGCACCAGAATTGATTCTTGG 623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         153 AGAAATTTTTATACTTAAAACTTTGAAACCACATCCAAACATAATTGAATATTTTAATGA 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
nes 328; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 0
CLASSIFICATION:
                                                                                                                                TCATGTTAGTGATTTATTTATTAAATCAAATATTTGAAAATTTCGGTACACCCAATTT
                                        TATAACTAATTATGAATATGAAATTGATATTTGGTCATTGGGTATAATTTTTGACTGGTTT
                                                                    AACTGATTTTGAAGATGAATTATTTTGTGATGAATATAATGAAAACTTGCATTTTAA
                                                                                                    ACAAGGTAACAATGACGATTTAAGTAATGATAATTATTTAAGTAGTGAAGAATTGAATAC
                                                                                                                                                                                              ATATTCAGAAAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGATTC
                                                                                                                                                                                                                                AAGGAATAATGAATATAATAGTAACAATATTGAATCGAAGTTTAATAATTATGTTGATGA 6390
                                                                                                                                                                                                                                                                                            TATGGAAAAAATAAGGGAAAAAATAAAGACAAAAAGAATTATCATTATGTTAATCATAA 6330
                                                                                                                                                                                                                                                                                                                                                                                      GATTATTGGAGATTTTGATATTTGTTATGATTTAAAACTGCCACCTAAAGATGAACCCCC 563
                                                                                                                                                                                                                                                                                                                                                                                                                      AAACAATCGTAGAAGTACAAATGAGAGGATGATGCTTATGGTAAACAATGAAAAAGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATTCATCGTGATATAAAACCCCAGTAATATTTTCTTTGCCCGGGATGATATAACACAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCAAATTATGGTTAAAATCAATGAGTTCAGGA-CTTGAATTTATTCATTCACAAGGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAATTGTTCTAATTAATAATAATGCTAGTGCATTTGTAAATGGAAAGGATAGAAATGATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TAATCTTGTTAGTAATCAATATACACTTGCTAATGAAATTG-----AAGAAAAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATGAAAGAGTTAATAGATAACGAAAATTTAAATGATGAATATAATAATAATAATATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTTAAAATTTATGATGATGTTATATTAGTCACCAAATTGTATCGTTATGATTTGAGTCA 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   703-816-4100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    703-816-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-Jul-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           45.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Leonard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 56.2; DB 2; Pred. No. 0.0037; 0; Mismatches 383;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 8920;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                       863
                                                                                                                                    803
                                                                                                                                                                                                 743
                                                                                                                                                                                                                                                              683
                                                                                                      6510
                                                                                                                                                                   6450
                                                                                                                                                                                                                                                                                                                                                           6270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ψ
```

```
CURRENT APPLICATION NUMBER: US/09/150,741
CURRENT FILING DATE: 1998-09-10
EARLIER APPLICATION NUMBER: PL6380
EARLIER FILING DATE: 1992-12-16
EARLIER FILING DATE: 1992-12-02
EARLIER FILING DATE: 1993-12-02
EARLIER APPLICATION NUMBER: 08/446,855
EARLIER APPLICATION NUMBER: 08/446,855
EARLIER FILING DATE: 1995-07-06
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 1
LENGTH: 8920
     Вb
                                     Ş
                                                                            В
                                                                                                         Qy
                                                                                                                                              DЬ
                                                                                                                                                                            Qγ
                                                                                                                                                                                                                   Дb
                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                      DЪ
                                                                                                                                                                                                                                                                                                                       Qγ
                                                                                                                                                                                                                                                                                                                                                            DЬ
                                                                                                                                                                                                                                                                                                                                                                                            δõ
                                                                                                                                                                                                                                                                                                                                                                                                                               D
                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-150-741-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
US-09-150-741-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Stewart et al.

TITLE OF INVENTION: Nucleotide Sequence Encoding Carbamoyl Phosphate
Patent No. 6183996

TITLE OF INVENTION: Synthetase II

FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/09150741 Patent No. 6183996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Plasmodium falciparum
                                                                                                                                                                                                                   6214
5974
                                                                                                                                                                                                                                                                                                                                                   6034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5854 agggaataataaaaatatggatatgtatttatctaaggaaaaaagtatatctaataaaaa 5913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6571 TAA 6573
                                                                                                                                                                                                                                                                                                                         444
                                                                                                                                                                                                                                                                                                                                                                                                385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            153 AGAAATTTTTATACTTAAAACTTTGAAAACCACCCAAACATAATTGAATATTTTAATGA 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          213
                                                                                                                                                                                                                                               GATTATTGGAGATTTTGATATTTGTTATGATTTAAAACTGCCACCTAAAGATGAACCCCC
                                                                                                                                       tatggaaaaaaataagggaaaaaataaagacaaaaagaattatcattatgttaatcataa
                                                                                                                                                                                                             ATATTCAGAAAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGATTC
                                                                                          TATAACTAATTATGAAATATGATATTTGGTCATTGGGTATAATTTTGACTGGTTT
                                                                                                                                                                                                                                                                                                                AATTCATCGTGATATAAAACCCAGTAATATTTTCTTTGCCCGGGATGATATAACACAACC
                                                                                                                                                                                                                                                                                                                                                                                                                    gaattgttctaattataataatgctagtgcatttgtaaatggaaaggatagaaatgataa
                                                                  aaggaataatgaatataatagtaacaatattgaatcgaagtttaataattatgttgatga
                                                                                                                                                                          TATGGCGAAATATATTGATGTATCTACAGGTATTTATAAAGCACCAGAATTGATTCTTGG
                                                                                                                                                                                                                                                                              aaacaatcgtagaagtacaaatgagaggatgatgcttatggtaaacaatgaaaaagagag
                                                                                                                                                                                                                                                                                                                                                                       ATCAAATTATGGTTAAAATCAATGAGTTCAGGA-CTTGAATTTATTCATTCATCACAAGGGAT 443
                                                                                                                                                                                                                                                                                                                                                                                                                                            TAATCTTGTTAGTAATCAATATACACTTGCTAATGAAATTG------AAGAAAAAGAT 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gatgaaagagttaatagataacgaaaatttaaatgatgaatataataataatgttaatat 6033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ccctggtaattcttattatgttgtagattccgtatataataatgaatacaaaattaataa 5973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTTAAAATTTATGATGATGTTATATTAGTCACCAAATTGTATCGTTATGATTTGAGTCA 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                328;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             45.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 56.2; DB 4; Pred. No. 0.0037;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            383;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 8920;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
 6450
                                   743
                                                                                                                                                                                                             6270
                                                                                                                                                                                                                                                                                6213
                                                                                                                                                                                                                                                                                                                                                       6153
                                                                                                                                                                                                                                                                                                                                                                                                                         6093
                                                                                                                                                                                                                                               563
                                                                                                                                                                                                                                                                                                                   503
                                                                                                                                           6330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ψ
```

```
Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 11
US-08-998-416-472/c
              δÃ
                                                                                                                                          ORGANISM:
US-08-998-416-472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 472, Application US/08998416 Patent No. 6239264 GENERAL INFORMATION:
                                                    Best Local Similarity Matches 225; Conserv
                                                                                                                                                                                                                                                                                                       TELEFAX: 919-541-8689
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Rebischung, Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
TITLE OF INVENTION: AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/998,416
FILING DATE: 24-DEC-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                           MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 767 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION: TELEPHONE: 919-541-8587
                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: CH 0
FILING DATE: 31-DEC-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            864 AAA 866
499 CAACCGATTATTGGAGATTTTGATATTTGTTATGATTTAAAACTGCCACCTAAAGATGAA 558
                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF/5-30306/A/CGC1976
                                                                                                                                                                                                                                                                                                                                                                                            NAME: Meigs, J. Timothy REGISTRATION NUMBER: 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         taa 6573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               acaaggtaacaatgacgatttaagtaatgataattatttaagtagtgaagaattgaatac 6510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCATGTTAGTGATTTATATATATATATATTTGAAAATTTTCGGTACACCCAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACTGATTTTGAAGATGAATTATTTTGTGATGAATAATAATGAAAACTTGCATTTTAA 863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SSEE: No. 6239264artis Corporation
T: 3054 Cornwallis Road
Research Triangle Park
: No. 6239264th Carolina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pohlmann, Rainer
Steiner, Sabine
Mohr, Christine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wendland, Jurgen
Knechtle, Philipp
                                                    Conservative
                                                                                                                                                                                                                                                                                                                       919-541-8689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Philippsen, Peter
                                                                                                                                                            PAG1337RP
                                                                                                                                                                                              DNA (genomic)
                                                                                                                                                                                                                                single
                                                                     5.3%;
45.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CH 0016/97
                                                                                                                                                                                                                                                                                                          472:
                                                    0;
                                                    Score 54.4; DB 4;
Pred. No. 0.0061;
0; Mismatches 266;
                                                                                       Length 767;
                                                      Indels
                                                      1;
                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        803
```

```
DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-998-416-683/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 683, Application US/08998416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Rebischung, Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF
TITLE OF INVENTION: AND USES THEREOF
NUMBER OF SEQUENCES: 1152
                                                                                                                                    SOFTWARE: PatentIn Release CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08
FILING DATE: 24-DEC-1997
                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 6239264artis Corporation
                                                                                                       CLASSIFICATION: 435 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                    FILING DATE: 31-DEC-1996
ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             591 ATAATAAAAAGGATTTAATTAATTATATACCTTTAGATAAAATTATTAGATTTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    978 AAGAATAACTTC 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                       COUNTRY:
        REFERENCE/DOCKET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTAATATTAATAAACTTAATAATCTATTTATTAATAAAAATGGTATATTTAATAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATTTAACTGATTTTGAAGATGÄATTATTTTGTGATGAATATAATA-ATGAAAACTTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTGGTATAACTAATTATGAATATGAAATTGATATTTGGTCATTGGGTATAATTTTGACT 678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCCCTATGGCGAAATATATTGATGTATCTACAGGTATTTATAAAGCACCAGAATTGATT 618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGCAATGATGATTTAATGAAAGAAATTTTTACCAAGATGATTAGATATGATCGAAGTAA 977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATTCTCATGTTAGTGATTTATATTTATTAAATCAAATATTTGAAAATTTTCGGTACACCC 798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTTTATATTCAGAAAATTTTCAAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITTAAAAAATTCAATTTACAAAAATATCCTAGAAAAGATTGGGATATTATTTTACCTCG 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACAAATAATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTTAAAATGTTTATGTTAAATAGATAATAATCAATTAAATAATAAAAATTAAGATGCC 172
                                                                                                                                                                                                                                                                          27709
                                                                                                                                                                                                                                                                                                       SSEE: No. 6239264artis C
: 3054 Cornwallis Road
Research Triangle Park
No. 6239264th Carolina
                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pohlmann, Rainer
Steiner, Sabine
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wendland, Jurgen
Knechtle, Philipp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mohr,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Philippsen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Christine
        NUMBER:
                                                                                       CH 0016/97
                                                                                                                                                                                       Release #1.0,
                                                                                                                                                       US/08/998,416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peter
38,241
ER: PF/5-30306/A/CGC1976
                                                                                                                                                                                           Version
                                                                                                                                                                                           #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                          ASHBYA GOSSYPII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     292
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                          US-08-998-416-534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: US-08-998-416-683
                                                                                                                                                                                                                                                                                                                                          Sequence 534, Application US/08998416 Patent No. 6239264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity Matches 197; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 919-541-8689 INFORMATION FOR SEQ ID NO:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                          APPLICANT: Rebischung, Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
TITLE OF INVENTION: AND USES THEREOF
                                                                                                                                             NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: lin
MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 724 base pairs
TYPE: nucleic acid
                                                   STATE: NO. COUNTRY: US ZIP: 27709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
                                                                                                  STREET:
CITY: F
                                                                                                                                                                                                                                                                                                                                                                                                                                    340 TAAACTTAATAATCTATTTATTAATAAAAATGGTATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  980 GAATAACTTCTAAAGAAATCTTACAATTAATGTTGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              920 GCAATGATTTAATGAAAGAAATTTTTTACCAAGATGATTAGATATGATCGAAGTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        860 TTAAAAAATTCAATTTACAAAATATCCTAGAAAAGATTGGGATATTATTTTACCTCGAT 919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 804 AACTGATTTTGAAGATGAATTATTTTGTGATGAAT----ATAATAATGAAAACTTGCATT 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      580 AGATTTAATTAATTTATATACTTTAGATAATAAATTATTAGATTTAAGTATTCTTAATAA 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               625 ATAACTAATTATGAATATGAAATTGATATTTGGTCATTGGGTATAATTTTGACTGGTTTA 684
                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: 919-541-8689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAGAAATATTACTAGACTAATAAAAATAAATATTATGAAAGGTACATTTAATAATTATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TATATTATTAGGTAAATATTTAGTAGGTAGTAATATCCAATTAAAGGGTAGACTATTAAA 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCATGTTAGTGATTTATATTTAAATCAAATATTTGAAAATTTCGGTACACCCCAATTT 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATTCAGAAAAT-TTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTAAAGATAATTATTAATAAATTACCATTTAATTATGATATATTATTATCAAAAAATTA 641
                                                                                SSEE: No. 6239264artis Corporation
T: 3054 Cornwallis Road
Research Triangle Park
No. 6239264th Carolina
                                                                  USA
                                                                                                                                                                                                                            Wendland, Jurgen
Knechtle, Philipp
                                                                                                                                                                                                                                                             Mohr, Christine
                                                                                                                                                                                                                                                                         Pohlmann, Raines
Steiner, Sabine
                                                                                                                                                                                                                                                                                                          Philippsen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAG1453RP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           919-541-8587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5.3%;
                                                                                                                                                              1152
                                                                                                                                                                                                                                                                                           Rainer
                                                                                                                                                                                                                                                                                                          Peter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           683:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 53.8; DB 4; Pred. No. 0.008;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  197;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 724;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2
```

APPLICANT: APPLICANT: APPLICANT: APPLICANT:

Pohlmann, Rainer Steiner, Sabine Mohr, Christine

Rainer

Wendland, Jurgen Knechtle, Philipp

APPLICANT

Rebischung,

APPLICANT:

Philippsen, Peter

```
RESULT 14
US-08-998-416-287
                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                  Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; MOLECULE TYPE: 1
; ORIGINAL SOURCE:
; ORGANISM: PAG:
US-08-998-416-534
Patent No. 6239264
GENERAL INFORMATION:
                                Sequence 287, Appr. Sequen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 854 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
APPLICATION UNBER: US/08/998,416
FILING DATE: 24-DEC-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               625 ATAACTAATTATGAATATGAAATTGATATTTGGTCATTGGGTATAATTTTTGACTGGTTTA 684
                                                                                                                                                                                                                                                        426 TAAACTTAATAATCTATTTATTAATAAAAATGGTATATT
                                                                                                                                                                                                                                                                                                                      980 GAATAACTTCTAAAGAAATCTTACAATTAATGTTGGATT 1018
                                                                                                                                                                                                                                                                                                                                                                                    920 GCAATGATGATTTAATGAAAGAAATTTTTACCAAGATGATTAGATATGATCGAAGTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              306 TAGAAATATTACTAGACTAATAAAAATAATATTATGAAAGGTACATTTAATAATTATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            860 TTAAAAAATTCAATTTACAAAAATATCCTAGAAAAGATTGGGATATTATTTTACCTCGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 804 AACTGATTITGAAGATGAATTATTTTGTGATGAAT----ATAATAATGAAAACTTGCATT 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS:
TOPOLOGY: liv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 2. CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: 919-541-8587
TELEFAX: 919-541-8689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCATGTTAGTGATTTATATTTAAATCAAATATTTGAAAATTTCGGTACACCCAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TATATTATTAGGTAAATATTTAGTAGGTAGTAATATCCAATTAAAGGGTAGACTATTAAA 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGATTTAATTAATATACTTTAGATAATAAATTATTAGATTTAAGTATTCTTAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATTCAGAAAAT-TTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGATTC 743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTAAAGATAATTATTAATAAATTACCATTTAATAATGATATTATTATTATCAAAAAATTA 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         197;
                                                                            Application US/08998416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAG1372UP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5.3%;
49.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PC-DOS/MS-DOS
n Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CH 0016/97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                534:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PF/5-30306/A/CGC1976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 53.8; DB 4;
Pred. No. 0.0082;
0; Mismatches 197;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 854;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              803
```

```
В
                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                      멍
                                                                                                                                                                           δÃ
                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
밁
                              Ş
                                                                     B
                                                                                                 δÃ
                                                                                                                                           Вp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 197; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 919-541-8689
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 31-DEC-1996
ATTORNEY/AGENT INFORMATION:
NAME: Medigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 860 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: 919-541-8587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                    804 AACTGATTTTGAAGATGAATTATTTTGTGATGAAT----ATAATAATGAAAACTTGCATT 859
                                                                                                                                                                                                                                                                                            186 AGATTTAATTAATTTATATACTTTAGATAATAAATTATTAGATTTAAGTATTCTTAATAA 245
                                                                                                                                                                                                                                                                                                                                                                                                    685 TATTCAGAAAAT-TTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGATTC 743
                                                                                                                                                                                                                                                                                                                                                                                                                                                              625 ATAACTAATTATGAATATGAAATTGATATTTGGCTCATTGGGTATAATTTTGACTGGTTTTA 684
426 TAAACTTAATAATCTATTTATTAATAAAATGGTATATT 464
                                                                                                                                                                                                                    246 TATATTATTAGGTAAATATTTAGTAGGTAGTAATATCCAATTAAAGGGTAGACTATTAAA 305
                                                                                                                                                                                                                                                                                                                              744 TCATGTTAGTGATTTATATTTAATATCAAATATTTGAAAATTTCGGTACACCCAATTT 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: No. 6239264artis Corporation STREET: 3054 Cornwallis Road CITY: Research Triangle Park STATE: No. 6239264th Carolina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 24-DECLASSIFICATION: 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                         66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: CH 0016/97 FILING DATE: 31-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM:
                                 GAATAACTTCTAAAGAAATCTTACAATTAATGTTGGATT 1018
                                                                       GCAATGATTAATGAAAGAAATTTTTACCAAGATGATTAGATATGATCGAAGTAAAA 979
                                                                                                                                             TAGAAATATTACTAGACTAATAAAAATAAATATTATGAAAGGTACATTTAATAATTATAT
                                                                                                                                                                             TTAAAAAATTCAATTTACAAAAATATCCTAGAAAAGATTGGGATATTATTTTACCTCGAT 919
                                                                                                                                                                                                                                                                                                                                                                    ATTAAAGATAATTAATAAAATTACCATTTAATAATGATATTATTATCAAAAAATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              860 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     919-541-8689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAG1240UP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-DEC-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              49.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/08/998,416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    287:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PF/5-30306/A/CGC1976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches 197;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 53.8; DB 4
Pred. No. 0.0082;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 860;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>ა</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                           125
                                                                           425
                                                                                                                                                 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2;
```

```
Qy
                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                    QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-998-416-288/c
                               Qy
                                                                     밁
                                                                                                                                          DЬ
                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                                                                                                                   US-08-998-416-288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 288, Application US/08998416 Patent No. 6239264
                                                                                                                                                                                                                                                                       5.3%; best Local Similarity 43.7%; Matches 292; Conservation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEL/...

NAME: Meigs, J. Timor..., 241
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF/5
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 919-541-8689
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: CH 00
FILING DATE: 31-DEC-1996
ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Rebischung, COTINGE
TITLE OF INVENTION: GENOMIC DNA SEQUI
TITLE OF INVENTION: AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 837 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                 662 TAAACAATAATATAGGTTCGGATCCTTTTATAAGTATTTTTAACTACATTCTTTATAATA 603
489
                                                                                                                                            602
                                                                                                                                                                             266
                                                                                                                                                                                                                                                  206 TTAATGATCTTAAAATTTATGATGATGTTATATTAGTCACCAAATTGTATCGTTATGATT 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 3054 Cornwallis Road
CITY: Research Triangle Park
STATE: No. 6239264th Carolina
                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS:
TOPOLOGY: li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/998,416 FILING DATE: 24-DEC-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM:
                                 TGAGTCAATTGAAATTACAAAATATTGTAAACGAACAACAACAACTATTATTGTA 325
AGAAATTAAAGTTAAATTAATTTTAATAATAATTCTTATAAAAAGATTAAATAATATAA
                                                                                                        TTAATGGTAATCTTGTTAGTAATCAATATACACTTGCTAATGAAATTGAAGAAAAAGATA 385
                                                                      27709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rebischung, Corinne
VENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wendland, Jurgen
Knechtle, Philipp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pohlmann, Rainer
Steiner, Sabine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mohr, Christine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Philippsen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                    PAG1241RP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           No. 6239264artis Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CH 0016/97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PF/5-30306/A/CGC1976
                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                          Score 53.6; DB 4; Length 837; Pred. No. 0.009;
                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                             369;
                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                      7;
                                                                        490
                                                                                                                                               546
```

```
δõ
                                                                                                                                                                                                       g
                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                       밁
                              В
                                               Qy
                                                                  밁
                                                                               δõ
                                                                                                   В
                                                                                                                Qy
                                                                                                                                 밁
                                                                                                                                                   δÃ
                                                                                                                                                                      В
                                                                                                                                   626 TAACTAATTATGAATATGAAATTGATATTTGGTCATTGGGTATAATTTTGACTGGTTTAT 685
                                                                                                                                                                    566 TGGCGAAATATATGATGTATCTACAGGTATTTATAAAGCACCAGAATTGATTCTTGGTA 625
                                                                                                                                                                                                                                       446 TICATCGTGATATAAAACCCAGTAATATITTCTTTGCCCGGGATGATATAACACAACCGA 505
                              866 AATTCAAT 873
                                                                                                   189
                                                                                                             686 ATTCAGAAAATTTTCAAAGTGTTTTAGTCAAAGATGATAAAGAATTGACTAATGATTCTC 745
                                                                                                                                                                                                                  506 TTATTGGAGATTTTGATATTTGTTATGATTTAAAACTGCCACCTAAAGATGAACCCCCTA 565
                                                                                                   ATTTAGAT 2
```

Search completed: May 29, 2002, 14:52:06 Job time: 17814 sec

•		,	

```
Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
      Pred. No. is the number of results predicted by chance score greater than or equal to the score of the result and is derived by analysis of the total score distribut
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB
BG
      264
255.5
255.5
255.5
255.5
249
240.5
236.5
236.5
236.5
237.2
237.2
237.2
237.2
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.3
237.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
Match
    US-09-072-994A-14
1791
1 MKLSDYYIDKELIYN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BLOSUM62
Gapop 10.0 , Gapext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #ending_Patents_AA_New:*

/cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep:*

/cgn2_6/ptodata/2/paa/US06_NEW_COMB.pep:*

/cgn2_6/ptodata/2/paa/US07_NEW_COMB.pep:*

/cgn2_6/ptodata/2/paa/US08_NEW_COMB.pep:*

/cgn2_6/ptodata/2/paa/US09_NEW_COMB.pep:*

/cgn2_6/ptodata/2/paa/US09_NEW_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            118494 segs, 28596836 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         May 29, 2002, 09:58:57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MKLSDYYIDKELIYNSAISD.....IRYDRSKRITSKEILQLMLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000000000
      DB
US-09-573-655B-294
US-60-366-892-8
US-60-366-892-8
US-60-366-892-8
US-60-366-892-6
US-60-366-892-6
US-60-366-892-3
US-60-366-892-4
US-60-366-892-43
US-60-366-892-43
US-09-573-655B-1255
PCT-US02-13142-8265
US-10-128-714-8141
US-10-128-714-8141
US-09-863-776-41
US-09-863-776-41
US-10-128-714-3141
US-09-573-655B-1256
US-10-128-714-3141
US-09-573-655B-1256
US-09-573-655B-1256
US-09-573-655B-1256
US-09-393-212-9
US-60-366-892-19
US-09-393-212-9
US-60-366-892-19
US-09-393-212-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      chosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Search time 12.26 Seconds (without alignments) 790.728 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              score distribution
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      118494
Sequence 294, Appli Sequence 8, Appli Sequence 8, Appli Sequence 7, Appli Sequence 7, Appli Sequence 7, Appli Sequence 40, Appli Sequence 41, Appli Sequence 41, Appli Sequence 1255, Appli Sequence 1255, Appli Sequence 410, Appli Sequence 8265, Appli Sequence 8141, Appli Sequence 8141, Appli Sequence 8141, Appli Sequence 8141, Appli Sequence 112, Appli Sequence 112, Appli Sequence 1136, Appli Sequence 1256, Appli Sequence 125, Appli Sequence 2, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             to have a being printed,
                                                                                               Ωy
                                                                                                                                       Вp
                                                                                                                                                                          Qy
                                                                                                                                                                                                                 Ъ
                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                      δλ
δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
      RESULT
```

262 O--WKPLSLSTAVPNL-DEAGLDLLSKMLEYEPAKRISAKKAME 302

RKDW-----DIILPRCNDDLMKEIETKMIRYDRSKRITSKEILQ

166 DLGLARAFTLPMKKYTHEILTLWYRAPEVLLGATHYSTGVDMWSVGCIFAELVTK--QAI 223

LYKDDKELTNDSHYSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYP 296

----SELQQLLRIFRLLGTPN----EEVWPGVSKLKDWH-----

DLKLPPKDEPPMAKYI-DVSTGIYKAPELILGITUYEYEIDIWSLGIILTGLYSENPQSV 236

114 -QAGQNIPQNTVKCLMYQLCKGMAFCHGHGVLHRDLKPHNLLMDRKTMTLKIA-----

165

 78

68 YFNDLK------IYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQ 117

178

118

79

237 LVKDDK | | | 224 FAGD--| | 297 RKDW--

Query Match Best Local Si Matches 89;	RESULT 1 US-09-573-655B-294 ; Sequence 294, Application US/09573655B ; Sequence 294, Application US/09573655B ; Sequence 294, Application US/09573655B ; Sequence 294, Application US/09573GENERAL INFORMATION: Squence-Determin TITLE OF INVENTION: Thereby ; FILE REFERENCE: 2750-0876p ; CURRENT APPLICATION NUMBER: US/09/573 ; CURRENT FILING DATE: 2000-05-18 ; NUMBER OF SEQ ID NOS: 3281 ; SOFTWARE: PATCHIN VERSION 3.0 ; SEQ ID NO 294 ; LENGTH: 315 ; ORGANISM: Arabidopsis thaliana US-09-573-655B-294		27 218 28 216 29 215 30 215 31 213.5 32 211.5 34 209.5 35 209.5 36 204.5 37 204 40 203 41 202 43 200 40 203 41 200 40 203 41 200 40 203 41 200 40 203	
similarity (plica ION: ION: ION: ION: 2750 ITION DATE: D NO: ICID V		11111111111111111111111111111111111111	
14.7% 25.9% valiya	victor and Sequence Det Thereby -0876P 000-05-18 : 3281 ersion 3.0		404 5 815 7 360 5 721 7 464 7 258 1 258 6 557 6 586 5 587 1 1150 7 420 7 420 1	
Score 264; DB 5; Pred. No. 5.4e-10; 64; Mismatches 111;	ed DNA Fragments	ALIGNMENTS	ALIGNMENTS	US-09-393-212-7 US-60-366-892-23 US-60-366-892-20 US-09-393-212-9 US-60-366-892-13 US-60-366-892-13 US-09-718-032-5-265 US-10-128-714-3265 US-10-128-714-3265 US-10-128-714-3265 US-10-128-714-3265 US-10-128-714-3265 US-10-108-60-366-892-10 US-09-393-212-10 US-60-366-892-10 US-60-365-264-699 US-60-365-264-370
Length 315; Indels 80; Gaps 16;	and Corresponding Polypeptid		Sequence 7, Appli Sequence 20, Appl Sequence 20, Appli Sequence 21, Appli Sequence 21, Appli Sequence 13, Appli Sequence 3265, Ap Sequence 3265, Ap Sequence 22, Appli Sequence 20, Appli Sequence 20, Appli Sequence 20, Appli Sequence 10, Appli Sequence 10, Appli Sequence 301, Appli Sequence 301, Appli Sequence 370, Appli Sequence 370, Appli Sequence 370, Appli Sequence 1, Appli	

```
Sequence 8, Application US/60366892
GENERAL INFORMATION:
APPLICANT: PRESCOTT, John C.
TITLE OF INVENTION: IDENTIFICATION OF KINASE INF
FILE REFERENCE: SUNESIS.006PR
CURRENT APPLICATION NUMBER: US/60/366,892
CURRENT FILING DATE: 2002-03-21
NUMBER OF SEQ ID NOS: 69
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 8
LENGTH: 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-60-366-892-7

Sequence 7, Application US/60366892

GENERAL INFORMATION:

APPLICANT: Prescott, John C.

TITLE OF INVENTION: IDENTIFICATION OF KINASE

FILE REFERENCE: SUNESIS.006PR

CURRENT APPLICATION NUMBER: US/60/366,892

CURRENT FILING DATE: 2002-03-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 69
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7
LENGTH: 298
TYPE: PRT
ORGANIAM: Homo sapiens
US-60-366-892-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Вp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QY
δÃ
                                     Ър
                                                                                                                                                                                                          ; ORGANISM: Homo US-60-366-892-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-60-366-892-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 14.6
Best Local Similarity 26.3
Matches 83; Conservative
                                                                                                      Query Match
Best Local Similarity
Matches 87; Conserv
                                                                                                                                                                                                                                                 TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    265 QMLHYDPNKRISAKAAL 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        318 KMIRYDRSKRITSKEIL 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               214 RIFRTLGTPDEVVWPGVTSMPDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    166 LWYRAPEILLGCKYYSTAVDIWSLGCIF--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         198 GIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSVLYKDDKELTNDSHVSDLYLLN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                139 GLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDFDICYDLKLPPKDEPPMAKYI-DVST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18 VYKARNKLTGEVVALKKIRLDTETEGVPSTAIREISLLKELN-HPNIVKLLDVIHTENKL
   63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    77 YLVFEFLHQDLKKFMDASA-----LTGIPLPL------IKSYLFQLLQ
                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYPRKDWDIILPRCNDDLMKEIFT 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GLAFCHSHRVLHRDLKPQNLLINTEGAIK--LADFGLARAFGV-----PVRTYTHEVVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLANEIEEKDIKLWLKSMSS 138
   PNITEYF -
                                       DMFQKVEKIGEGTYGVVYKAKNRETGQLVALKKIRLDLEMEGVPSTAIREISLLKELK-H
                                                                          DYYIDKELIYNSAISDIYTAIDKFNNLPVCLKIVDEDFSLP--PHSIHREIFILKTLKPH 62
                                                                                                                Conservative
                                                                                                                                                                                                                              sapiens
 NDLKIYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQY 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14.6%; Score 262; DB 7; 26.2%; Pred. No. 6.8e-10;
                                                                                                                14.3%; Score 256; DB 7; 25.8%; Pred. No. 1.6e-09; tive 58; Mismatches 128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches 119; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----AEMVTRRALFPGDSEIDQLF---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -KPSFPKWARQDFSKVVPPLDED-GRSLLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INHIBITORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 298;
                                                                                                                                                   Length 305;
                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          113
                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11;
                                                                                                                    12;
```

```
Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          рь
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 69
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 39
LENGTH: 424
TYPE: PRT
ORGANISM: Homo sapiens
US-60-366-892-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                     δÃ
                                                                                                                                            Б
                                                                                                                                                                            2
                                                                                                                                                                                                                    뫄
                                                                                                                                                                                                                                                  24
                                                                                                                                                                                                                                                                                         DЬ
                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                             DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-60-366-892-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                 Qy
                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Prescott, John C.
APPLICANT: INFORMATION: IDENTIFICATION OF KINASE
FILE REFERENCE: SUNESIS.006PR
CURRENT APPLICATION NUMBER: US/60/366,892
CURRENT FILING DATE: 2002-03-21
                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 39, Application US/60366892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  246 KGLEEIVPNLEPE-GRDLLMQLLQYDPSQRITAKTAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    119 TLANEIEEKDIKLWLKSMSSGLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDFDICYD
279 -IFPSESERDKIKTSQARDLLSKMLVIDPDKRISVDEALR 317
                                     302
                                                                         230
                                                                                                           249
                                                                                                                                              186
                                                                                                                                                                                  189
                                                                                                                                                                                                                      132
                                                                                                                                                                                                                                                      133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                         99
                                                                                                                                                                                                                                                                                                                             73
                                                                                                                                                                                                                                                                                                                                                               40 VCAAFDTVLGISVAVKKLSRPFQNQTHAKRAYRELVLLKCVN-HKNIISLLNVFTPQKTL
                                                                                                                                                                                                                                                                                                                                                                                                 21 IYTAIDKFNNLPVCLKIVDEDFSLPPHS--IHREIFILKTLKPHPNIIEYFN-----DL
                                                                                                                                                                                                                | KKSMSSGLEFIHSOGIIHRDIKPSNIFFARDDITQPIIGDFDI----CYDLKLPPKDEPP 188
| | | |:::|| |||||:|||| : | | |:|| : |
| LYQMLCGIKHLHSAGIIHRDLKPSNI-VVKSDCTLKIL-DFGLARTACTNFMMTPY---- 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VKDDKELTNDSHVSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYPR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LKLPPKDEPPMAKYI-DVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSVL 237
                                                                                                                                                                                                                                                                                                                           KIYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLANEIEEKDIKLW 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KDWDIILPRCNDDLMKEIFTKMIRYDRSKRITSKEIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               --GSELPLHLIKSYLFQLLQGVSFCHSHRVIHRDLKPQNLLI--NELGAIKLADFGLARA 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PNIVRLLDVVHNERKLY - - - - LVFEFLSQDLKKYMDSTP - -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FGV-----PLRTYTHEVVTLWYRAPEILLGSKFYTTAVDIWSIGCIF
                                 IILP-----RCNDDLMKEIFTKMIRYDRSKRITSKEILQ 335
                                                                       HIDQ - - - WNKVIEQLGTPS - AEFMKKLQPTVRNYVE - - - - - NRPKYPGIKFEELFPDW -
                                                                                                         HVSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYPR------KDWD
                                                                                                                                                                                MAKYIDVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSVLVKDDKELTNDS
                                                                                                                                                                                                                                                                                         EEFQDVYLVMELMDANLCQVIHM----
                                                                                                                                                ----VVTRYYRAPEVILGM-GYKENVDIWSVGCIM-
                                                                                                                                                                                                                                                                                                                                                                                                                                    92;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                       14.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                        49;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 255.5; DB 7;
Pred. No. 2.6e-09;
9; Mismatches 112;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 424;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                -GELVKGCVIFQGTD
                                                                                                                                                                                                                                                                                             ELDHERMSYL 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            --- АЕМ 196
                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                    98
                                                                                                                                                    229
                                                                                                                                                                                      248
                                                                             278
                                                                                                                                                                                                                                                                                                                                                                                                                                            16;
```

US-09-863-776-40
; Sequence 40, Application US/09863776
; GENERAL INFORMATION:
; APPLICANT: Spytek, Kimberly A
; APPLICANT: Majumder, Kumud

```
õ
                                                                                 밁
                                                                                                                         ρy
                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Serine/threonine protein kinase, ca: OTHER INFORMATION: Consensus Sequence US-09-863-776-40
                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/208, 263
PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: 60/208, 831
PRIOR APPLICATION NUMBER: 60/209, 451
PRIOR APPLICATION NUMBER: 60/209, 451
PRIOR FILING DATE: 2000-06-05
PRIOR APPLICATION NUMBER: 60/210,060
PRIOR APPLICATION NUMBER: 60/210,060
PRIOR FILING DATE: 2000-06-07
PRIOR APPLICATION NUMBER: 60/219,507
PRIOR APPLICATION NUMBER: 60/219,507
PRIOR FILING DATE: 2000-07-26
PRIOR APPLICATION NUMBER: 60/221,337
PRIOR FILING DATE: 2000-07-26
PRIOR FILING DATE: 2000-07-26
PRIOR FILING DATE: 2000-07-26
PRIOR FILING DATE: 2000-07-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/20
PRIOR FILLING DATE: 2000-05-24
PRIOR APPLICATION NUMBER: 60/20
PRIOR FILLING DATE: 2000-05-30
PRIOR APPLICATION NUMBER: 60/20
PRIOR FILLING DATE: 2000-05-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver.
SEQ ID NO 40
LENGTH: 256
                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE: 21402-020
CURRENT APPLICATION NUMBER: US/09/863,776
CURRENT FILING DATE: 2001-05-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/221,927 PRIOR FILING DATE: 2000-07-31 PRIOR APPLICATION NUMBER: 60/263,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/2
PRIOR FILING DATE: 2000-05-24
PRIOR APPLICATION NUMBER: 60/2
PRIOR FILING DATE: 2000-05-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Gangolli, Esha
TITLE OF INVENTION: Novel Proteins and Nucleic Acids Encoding Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 2001-01-24
NUMBER OF SEQ ID NOS: 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 09/540,763
PRIOR FILING DATE: 2000-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
100
                                          129
                                                                                    62
                                                                                                                                69
                                                                                                                                                                                                                    11
                                                                                                                                                                        G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/263,135 FILING DATE: 2001-01-19 APPLICATION NUMBER: 60/263,688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 2001-01-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/263,694
                       IKLWLKSMSSGLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDFDICYDLKLPPKDEPP 188
                                                                                                                                                                                                                  ELIYNSAISDIYTAIDKFNNLPVCLKIVDED--FSLPPHSIHREIFILKTLKPHPNIIEY 68
ARFYARQILSALEYLHSQGIIHRDLKPENILLDSDGHVK -- LADFG --
                                                                                                                           FNDLKIYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLANEIEEKD 128
                                                                                                                                                                        EVLGKGAFGKVYLARDKDTGRLVAIKVIKKEKLKKKKRERILREIKILKKL-DHPNIV--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shenoy, Suresh G
Rastelli, Luca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Padigaru, Muralidhara
Spaderna, Steven K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tchernev, Velizar T
Mishra, Vishnu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Taupier, Raymond J
                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                 14.28;
27.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/207,798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/207,748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/206,829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/206,688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/206,679
                                                                                                                                                                                                                                                                 47;
                                                                                                                                                                                                                                                            Score 253.5; DB 5;
Pred. No. 1.9e-09;
47; Mismatches 99;
                                                                                    DLLKKR----GRLSEDE
                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                    catalytic
                                                                                                                                                                                                                                                                                                         256;
                                                                                                                                                                                                                                                          99;
                                                                                                                                                                                                                                                                                                                                                                                                                    domain
                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                        61
                                                                                    99
                                                                                                                                                                                                                                                              16;
```

```
US-60-370-796-7

Sequence 7, Application US/60370796

GENERAL INFORMATION:

APPLICANT: Zinselmeier, Chris

APPLICANT: Helentjaris, Timothy G.

FITIE OF INVENTION: Enhanced Silk Exsertion

TITIE OF INVENTION: Under Stress

FILE REFERENCE: 1421P

CURRENT APPLICATION NUMBER: US/60/370,796

CURRENT FILING DATE: 2002-04-08
US-60-366-892-6

Sequence 6, Application US/60366892

GENERAL INFORMATION:
APPLICANT: Prescott, John C.
TITLE OF INVENTION: IDENTIFICATION OF KINASE
FILE REFERENCE: SUNESIS.006PR
CURRENT APPLICATION NUMBER: US/60/366,892

CURRENT FILING DATE: 2002-03-21

NUMBER OF SEQ ID NOS: 69
                                                                                                                                                                                                                                                                                                                                                                                            Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                  뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               : NUMBER OF SEQ ID NOS: 26
: SOFTWARE: FastSEQ for Windows Version 4.0
: SEQ ID NO 7
: LENGTH: 292
: TYPE: PRT
: ORGANISM: Zea mays
US-60-370-796-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q
                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                             Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 86; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                    245 PVDLATVVPTLEPSGI-DLLSKMLRLDPSKRITARAALE
                                                                                                                                                                                                                                         297 RKDWDIILPRCNDDLMKEIFTKMIRYDRSKRITSKEILQ 335
                                                                                                                                                                                                                                                                                           196 MVNQKALFPGDSEIDELF---KIFRILGTPTKETWPGVASLPDY
                                                                                                                                                                                                                                                                                                                             237
                                                                                                                                                                                                                                                                                                                                                              150
                                                                                                                                                                                                                                                                                                                                                                                                177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   118
                                                                                                                                                                                                                                                                                                                                                                                                                                   98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62 HPNIIE----YFNDLKIYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQ 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 DQYEKVEKIGEGTYGVVYKGKDRHTNETIALKKIRLEQEDEGVPSTAI-REISLLKEMQ-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5 DYYIDKELIYNSAISDIYTAIDKFNNLPVCLK---IVDEDFSLPPHSIHREIFILKTLKP 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WDIILPRCNDDLMKEIFTKMIRYDRSKRITSKEILQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DDKELTNDSHVSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYPRKD
                                                                                                                                                                                                                                                                                                                                                                                              YDLKLPPKDEPPMAKYIDVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSV 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WK-ISPEAK-DLIKKLLVK----DPEKRLTAEEALK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DDQLLA - -
                                                                                                                                                                                                                                                                                                                                                                                                                                                    YTLANEIEEKDIKLWLKSMSSGLEFIHSQGIIHRDIKPSNIFF-ARDDITQPIIGDFDIC 176
                                                                                                                                                                                                                                                                                                                           LVKDDKELTNDSHVSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYP 296
                                                                                                                                                                                                                                                                                                                                                             RAFGIPVRTFTH-----EVVTLWYRAPEILLGARHYSTPVDVWSVGCIF------AE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HRNIVRLQEVVHNDKCIY----LVFEYLDLDLK-----KHMDSSTDF
                                                                                                                                                                                                                                                                                                                                                                                                                                  -----KNHRIVKSFLYQILRGIAYCHSHRVLHRDLKPQNLLIDRRNNLLK--LADFGLA 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ----LFKKIGKPK----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 249; DB 7;
Pred. No. 4.3e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Exsertion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and
                                                                              INHIBITORS
                                                                                                                                                                                                                        282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Seed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          --ppfpppE
                                                                                                                                                                                                                                                                                             KSTFPKWP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         299
                                                                                                                                                                                                                                                                                           244
                                                                                                                                                                                                                                                                                                                                                                195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14;
```

```
RESULT 8
US-60-366-82-38
US-60-366-82-38
Sequence 38, Application US/60366892
Sequence 38, Application US/60366892
GENERAL INFORMATION:
APPLICANT: Prescott, John C.
FILE REFERENCE: SUMESIS, OBER
CURRENT APPLICATION NUMBER: US/60/366,892
CURRENT FILING DATE: 2007-03-21
NUMBER OF SEQ ID NOS: 69
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 38
LENGTH: 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: PRT; ORGANISM: Homo sapiens US-60-366-892-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . 망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ωy
                                                                                                                                                                                                                                                                                                        ; ORGANISM: Homo US-60-366-892-38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                        δÃ
                                                                                                     Дb
                                                                                                                              δ
                                                                                                                                                                 Ъ
               20
                                             g
                                                                                                                                                                                            QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ
SEQ ID NO 6
LENGTH: 297
                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          156 -----PIRVYTHEVVTLWYRSPEVLLGSARYSTPVDIWSIGTIFAELATK------
                 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    242 KELTN-DSHVSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYPRKDW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64
                                                                                                                                      50
                                                                                                                                                                    11
                                                                                                                                                                                                 Local Similarity
les 91; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  YIDKELIYNSAISDIYTAIDKFNNLPVCLK---IVDEDFSLPPHSIHREIFILKTLKPHP 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DIILPRCNDDLMKEIFTKMIRYDRSKRITSKEIL
|: :: :||: || :||: | |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NIVS-LQDVLMQDSRLYLIFEFLSMDLKKYLD------SIPPGQY----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NIIEYFNDLKIYDD-VILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLAN 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KPLFHGDSEIDQLF---RIFRALGTPNNEVWPEVESLQDYKNTFPKWKPGSLASHVKN--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -MDSSLVKSYLYQILQGIVFCHSRRVLHRDLKPQNLLI--DDKGTIKLADFGLARAFGI- 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               YTKIEKIGEGTYGVVYKGRHKTTGQVVAMKKIRLESEEEGVPSTAI-REISLLKELR-HP
DITQPIIGDEDICYDLKLPPKDEPPMAKYIDVSTGIYKAPELILGITNYEYEIDIWSLGI
                                                                                                                        HREIFILKTLKPHPNIIEVFN-----DLKIYDDVILVTKLYRYDLSQLIEITKYCKRTT 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -----LDENGLDLLSKMLIYDPAKRISGKMAL 282
                                                                                                        YRELYLMKCVN-HKNIIGLLNVFTPQKSLEEFQDVYIVMELMDANLCQVIQM------
                                                                                                                                                                   YSVEIGDSTFTVLKRYQNLKPIGSGAQGIVCAAYDAILERNVAIKKLSRPFQNQTHAKRA 70
                                                                          RFIYGINGNLVSNQYTLANEIEEKDIKLWLKSMSSGLEFIHSQGIIHRDIKPSNIFFARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 Similarity
85; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for
                                                                                                                                                                                                                                           13.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Windows
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13.4%; Score 240.5; DB 7; Length 25.4%; Pred. No. 1.5e-08; tive 61; Mismatches 127; Indels
                                               ELDHERMSYLLYQMLCGIKHLHSAGIIHRDLKPSNI-VVKS
                                                                                                                                                                                                                             ; Score 236.5; DB 7;
; Pred. No. 3.9e-08;
55; Mismatches 111;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                           Length 427;
                                                                                                                                                                                                                                Indels 115;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           297;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     200
                                                  161
                    223
                                                                                                           121
                                                                               163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14;
                                                                                                                                                                                                                                17;
```

US-09-909-650A-24

Sequence 24, Application US/09909650A

GENERAL INFORMATION:
APPLICANT: Aventis Pharmaceuticals Inc.
APPLICANT: Fournier, Alain
APPLICANT: Maury, Isabelle

APPLICANT: Maury, Isabelle
APPLICANT: Zhou-Liu, Qing
APPLICANT: Desanlis-Cremond, Francine
TITLE OF INVENTION: New Polypeptides Derived From JNK3
FILE REFERENCE: ST99003-US-CNT-1

```
US-60-366-892-43; Sequence 43, Application US/60366892; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                   Qy
                                                                                                                                                                                                          Дb
                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                           Дb
                                                                                                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 360
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-366-892-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
밁
                              δÃ
                                                                 Вþ
                                                                                                  ρy
                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT FILING DATE: 2002-03-21
NUMBER OF SEQ ID NOS: 69
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 43
                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Prescott, John C.
TITLE OF INVENTION: IDENTIFICATION OF KINASE INHIBITORS
FILE REFERENCE: SUNESIS, 006PR
CURRENT APPLICATION NUMBER: US/60/366,892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         162 DCTLKILD-----FGLARTAGTSFMMTPY--VVTRYYRAPEVILGM-GYKENVDLWSVGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    306 ASKRISVDEALQ 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   324 RSKRITSKEILQ 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      284 NLHFKKF-----NLQKYPRKDW-----DIILP-----RCNDDLMKEIFTKMIRYD
264
                                294 KYPRKDWDIILPRCNDDLMKEIFTKMIRYDRSKRITSKEIL 334
                                                                   214 -AELLTGRTLFPGTDHIDQLKLILRL---VGTPGA-----ELL-KKISSESARNYIQSLT
                                                                                                    234
                                                                                                                                      168
                                                                                                                                                                         174
                                                                                                                                                                                                           124
                                                                                                                                                                                                                          114 VSNQYTLANEIEEKDIKLWLKSMSSGLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDF 173
                                                                                                                                                                                                                                                                               79
                                                                                                                                                                                                                                                                                               60 KPHPNIIEYEN-----DLKIYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNL 113
                                                                                                                                                                                                                                                                                                                                               19 EVPERYONLSPVGSGAYGSVCAAFDTKTGLRVAVKKLSRPFQSIIHAKRTYRELRLLKHM
                                                                                                                                                                                                                                                                                                                                                                                 2 KLSDYYIDKELIYNSAISDIYTAIDKFNNLPVCLKIVDEDFSLPPHS--IHREIFILKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IMGEMVCH------KILFPGRDYIDQW--NKVIEQLGTP-------CPEF---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---MKKLQPTVRTYVENRPKYAGYSFEKLFPDVLFPADSEHNKLKASQARDLLSKMLVID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ILTGLYSENFQSVLVKDDKELTNDSHVSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNE 283
                                                                                                                                                        DICYDLKLPPKDEPPMAKYIDVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLYSENF 233
QMPKMNFANVFIGAN-PLAVDLLEKMLVLDSDKRITAAQAL
                                                                                     K-HENVIGILDVFTPARSLEEFNDVYLVTHLMGADLNNIVK----CQKLT-----
                                                                                                                                      ----DFGLARHTDDEMTGY--VATRWYRAPEIMLNWMHYNQTVDIWSVGCIM-----
                                                                                                                                                                                                                                                                                                                                                                                                                      84;
                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                          -DDHVQFLIYQILRGLKYIHSADIIHRDLKPSNL-AVNEDCELKIL---
                                                                                                                                                                                                                                                                                                                                                                                                                                  13.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                      66;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 235; DB 7; Length 360; pred. No. 4e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches 127;
     303
                                                                                                                                                                                                                                                                                                                                                                                                                      Indels 64;
                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            248
                                                                                                         293
                                                                                                                                                                                                               167
                                                                                                                                                                                                                                                                                  123
                                                                                                                                                                                                                                                                                                                                                      78
                                                                                                                                                                                                                                                                                                                                                                                       59
                                                                                                                                            213
                                                                                                                                                                                                                                                                                                                                                                                                                       13;
```

```
CURRENT APPLICATION NUMBER: US/09/909,650A
CURRENT FILING DATE: 2002-04-11
PRIOR APPLICATION NUMBER: PCT/FR00/00104
PRIOR FILING DATE: 2000-01-19
PRIOR APPLICATION NUMBER: US 60/122,175
PRIOR FILING DATE: 1999-02-26
PRIOR APPLICATION NUMBER: US 99/00586
PRIOR FILING DATE: 1999-01-20
UMBER OF SEQ ID NOS: 29
SOFTWARE: Patentin version 3.1
SEQ ID NO 24
                                                                                                                                                                                                                                                                                                                                 RESULT 11
US-60-366-892-40
; Sequence 40, Application US/60366892
; GENERAL INFORMATION:
; APPLICANT: Prescott, John C.
; TITLE OF INVENTION: IDENTIFICATION OF KINASE INHIBITORS
; FILE REFERENCE: SUNESIS.006PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: PRT; ORGANISM: homo sapiens US-09-909-650A-24
Š
                                                                                                                                               ; ORGANISM: Homo sapiens US-60-366-892-40
                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/60/366,892
CURRENT FILING DATE: 2002-03-21
NUMBER OF SEQ ID NOS: 69
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 13.1%; Score 235; DB 5; Best Local Similarity 23.8%; Pred. No. 4.9e-08; Matches 91; Conservative 62; Mismatches 114
                                                            Query Match
Best Local
                                                                                                                                                                                        LENGTH: 464
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ENGTH: 426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                        Local Similarity les 91; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  w
  3 LSDYYIDKELIYNSAISD-IYTAIDKFNNLP--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEIFTKMIRYDRSKRITSKEILQ 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EYEIDIWSLGIILTGLYSENFOSVLVKDDKELTNDSHVSDLYLLNQIFENFGTPNLTDFE 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LKPSNI-VVKSDCTLKILD-----FGLARTAGTSFMMTPY--VVTRYYRAPEVILGM-GY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DELFCDEYNNENLHFKKF------NLQKY----PRKDWDIILP-----RCNDDLM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KENVDIWSVGCIM----GEMVRHKILFPGRDYIDQ-----WNKVIEQLGTP-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IKPSNIFFARDDITQPIIGDFDICYDLKLPPKDEPPMAKYIDVSTGIYKAPELILGITNY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DESLPPHS--IHREIFILKTLKPHPNIIEYFN-----DLKIYDDVILVTKLYRYDLSQL 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RDLLSKMLVIDPAKRISVDDALQ 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MSKSKVDNQ-FYSVEVGDSTFTVLKRYQNLKPIGSGAQGIVCAAYDAVLDRNVAIKKLSR 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ----CPEF-----MKKLQPTVRNYVENRPKYAGLTFPKLFPDSLFPADSEHNKLKASQA 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IEITKYCKRTTRFIYGINGNLVSNQYTLANEIEEKDIKLWLKSMSSGLEFIHSQGIIHRD 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PFQNQTHAKRAYRELVLMKCVN-HKNIISLLNVFTPQKTLEEFQDVYLVMELMDANLCQV 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                            13.1%; Score 235; DB 7; 23.8%; Pred. No. 5.4e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -------ELDHERMSYLLYQMLCGIKHLHSAGIIHRD
                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          114;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 426;
                                                                            Length 464;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels 116;
                                        Indels 116;
  ----VCLKIVDE 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18;
                                          18;
```

```
; LENGTH: 444
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-09-573-655B-1255
                  QΥ
                                                      Вþ
                                                                                        δÃ
                                                                                                                              da
                                                                                                                                                               Ωy
                                                                                                                                                                                                         Дb
                                                                                                                                                                                                                                           Ωy
                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                    Q_{Y}
                                                                                                                                                                                                                                                                                                                                                            DЪ
                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
US-09-573-655B-1255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: SOLOVYEV, Victor and TROUKHAN, Maxim
TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptid
TITLE OF INVENTION: Thereby
FILE REFERENCE: 2750-0876P
CURRENT APPLICATION NUMBER: US/09/573,655B
CURRENT FILING DATE: 2000-05-18
NUMBER OF SEQ ID NOS: 3281
SOFTWARE: Patentin version 3.0
SEQ ID NO 1455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1255, Application US/09573655B GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         190
                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  157
291 NLQKYPRKDWDIILPRCNDDL----MKEIETKMIRYDRSKRITSKEIL 334
                                                        332
                                                                                                                                                                                                                                                                                    187
                                                                                                                                                                                                                                                                                                                                                              131 DYEVVRK-VGRGKYSEVFEGIHATDNEKCVIKILK---PVKKKKIKREIKILQNLCGGPN 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                313 KEIFTKMIRYDRSKRITSKEILQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          153 IKPSNIFFARDDITQPIIGDFDICYDLKLPPKDEPPMAKYIDVSTGIYKAPELILGITNY 212
                                                                                                                                                   182 PPKDEPPMAKYIDVSTGIYKAPELILGITNYEYEIDIWSLGIILTGL------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    283 ----CPEF-----MKKLQPTVRNYVENRPKYAGLTFPKLFPDSLFPADSEHNKLKASQA 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   39
                                                                                                                                                                                                                                                                                                                        65 IIEYFNDLKIYDDVILVTKLYRYDLSQLIEITK-YCKRTTRFIYGINGNLVSNQ--YTLA 121
                                                                                                                                                                                                                                                                                                                                                                                  5 DYYIDKELIYNSAISDIYTAIDKFNNLPVCLKIVDEDFSLPPHSIHREIFILKTLKPHPN 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KENVDIWSVGCIM----GEMVRHKILFPGRDYIDQ------WNKVIEQLGTP----- 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EYEIDIWSLGIILTGLYSENFQSVLVKDDKELTNDSHVSDLYLLNQIFENFGTPNLTDFE 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LKPSNI-VVKSDCTLKILD-----FGLARTAGTSFMMTPY--VVTRYYRAPEVILGM-GY 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DFSLPPHS--IHREIFILKTLKPHPNIIEYFN-----DLKIYDDVILVTKLYRYDLSQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SKSKVDNQ-FYSVEVGDSTFTVLKRYQNLKPIGSGAQGIVCAAYDAVLDRNVAIKKLSR 97
                                                      YDQLVKIAKVLGTDE-----LNAYLNKYRIELDPNLTSL----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RDLLSKMLVIDPAKRISVDDALQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DELFCDEYNNENLHFKKF-----NLQKY-----PRKDWDIILP-----RCNDDLM 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IQM-----ELDHERMSYLLYQMLCGIKHLHSAGIIHRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PFQNQTHAKRAYRELVLMKCVN-HKNIISLLNVFTPQKTLEEFQDVYLVMELMDANLCQV 156
                                                                                        QSVLVKDDKELTNDSHVSDLYLLNQIFENFG---TPNLTDFEDELFCDEYNNENLHFKKF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IEITKYCKRTTRFIYGINGNLVSNQYTLANEIEEKDIKLWLKSMSSGLEFIHSQGIIHRD 152
                                                                                                                              AEFYHPGKEYNVRVASRYFKGPELLVDLQDYDYSLDLWSLGCMFAGMIFRKEPFFYGHDN 331
                                                                                                                                                                                                                                                                                  IV----EHVNNKDFKVLY 218
                                                                                                                                                                                                                                                                                                                                                                                                                                     80; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                     13.0%; Score 232; DB 5; 23.0%; Pred. No. 7.9e-08; tive 60; Mismatches 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 444;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                     YSENF 233
                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                            290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             92
                                                        365
                                                                                                                                                                                                                                                                                                                                                                                                                                       12;
```

В

366 -VGRHSRKPWTKFINSENQHLAVPEAVDFVDKLLRYDHQERPTAKEAM 412

```
PRIOR APPLICATION NUMBER: US 60/285,697
PRIOR FILING DATE: 2001-04-23
PRIOR APPLICATION NUMBER: US 60/287,066
PRIOR FILING DATE: 2001-04-27
PRIOR APPLICATION NUMBER: US 60/295,890
PRIOR APPLICATION NUMBER: US 60/303,899
PRIOR FILING DATE: 2001-07-09
PRIOR FILING DATE: 2001-07-09
PRIOR APPLICATION NUMBER: US 60/316,362
PRIOR APPLICATION NUMBER: US 60/316,362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 13
PCT-US02-13142-8265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: PRT ; ORGANISM: Aspergillus fumigatus PCT-US02-13142-8265
                                                                                                                                                                                                                                    US-10-128-714-8265
                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                        ф
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 8265, Application PC/TUS0213142
GENERAL INFORMATION:
APPLICANT: Elitra Pharmaceuticals, Inc.
TITLE OF INVENTION: Identification of Essential Genes
TITLE OF INVENTION: Methods of Use
FILE REFERENCE: 10182-018-228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn version 3.1
SEQ ID NO 8265
LENGTH: 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                      Sequence 8265, Application GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT FILING DATE: 2002-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 8603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US PRIOR FILING DATE: 2001-08-31
APPLICANT: Jiang, Bo
APPLICANT: Hu, Wengi
APPLICANT: Tishkoff, Daniel
APPLICANT: Zamudio, Carlos
APPLICANT: Zamudio, Carlos
APPLICANT: Eroshkin, Alexey M
APPLICANT: Lemieux, Sebastien M
APPLICANT: Lemieux, Sebastien M
TITLE OF INVENTION: Identification of Essential Genes in Aspergillus fumigatus and
TITLE OF INVENTION: Methods of Use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         115 KNMGLGDAMVKKFMAQLVEGIRYCHSHRILHRDLKPQNLLIDRDGNLK--LADFGLARAF 172
                                                                                                                                                                                                                                                                                                                                266 QDPHTLVPGLEEDGL-DLLEALLEYDPARRISAKQ 299
                                                                                                                                                                                                                                                                                                                                                                          298 KDWDIILPRCNDDLMKEIFTKMIRYDRSKRITSKE
                                                                                                                                                                                                                                                                                                                                                                                                                        220 ---KPLFPGDSEIDEIF---KIFGLLGTPDETTWPGVTSFPDY--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    239 KDDKEL-TNDSHVSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYPR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180 KLPPKDEPPMAKYI-DVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSVLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66 RLLNIVHADGHKLY----LVFEFLDLDLKKYMEALPVSE-----GGRGKALPEGSALS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7 YIDKELIYNSAISDIYTAIDKFNNLPVCLKIVDEDFSLPPHSIHREIFILKTLKPHPNII 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NEIBEKD--IKLWLKSMSSGLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDFDICYDL 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YKARELTHPNRI----VALKK------IRLEAEDEGVPSTAI-REISLLKEMS-DPNIV 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GV-----PLRTYTHEVVTLWYRSPEILLGGRQYSTGVDMWSCGAIFAEMCTR-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EYFNDL-----KIYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLA 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            82;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12.5%; Score 224.5; DB 1; 24.5%; Pred. No. 1.6e-07; ative 67; Mismatches 123;
                                                                                                                                                                                                              US/10128714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 in Aspergillus fumigatus and
                                                                                                                                                                                                                                                                                                                                                                                                                             -KPTFPKWKR 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               63;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16;
```

SEQ ID NO 490 LENGTH: 527

TYPE: PRT

ORGANISM: Homo sapiens

SOFTWARE:

PatentIn Ver.

2.0

```
; ORGANISM: Aspergillus fumigatus US-10-128-714-8265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                           δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
           CURRENT APPLICATION NUMBER: US/10/102,806
CURRENT FILING DATE: 2002-03-22
PRIOR APPLICATION NUMBER: 09/925,298
PRIOR FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: POT/US00/05881
PRIOR APPLICATION NUMBER: FOT/US00/05881
PRIOR APPLICATION NUMBER: 60/124,270
PRIOR FILING DATE: 2000-03-08
PRIOR FILING DATE: 1999-03-12
                                                                                                                                                                                                                                                                                                           RESULT 15
US-10-102-806-490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 8265
LENGTH: 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 82; Conserv
                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Rosen et al.
                                                                                                                                                                                                                                                                                    Sequence 490, Application US/10102806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 60/287,066
PRIOR FILING DATE: 2001-04-27
PRIOR APPLICATION NUMBER: US 60/295,890
PRIOR FILING DATE: 2001-06-05
PRIOR APPLICATION NUMBER: US 60/303,899
PRIOR FILING DATE: 2001-07-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/128,714
CURRENT FILING DATE: 2002-04-23
PRIOR APPLICATION NUMBER: US 60/285,697
PRIOR FILING DATE: 2001-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: 10182-018-999
CURRENT APPLICATION NUMBER: U:
CURRENT FILING DATE: 2002-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 60/316,362
PRIOR FILING DATE: 2001-08-31
NUMBER OF SEQ ID NOS: 8603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                            TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies FILE REFERENCE: PA103P1C1
NUMBER OF SEQ ID NOS: 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   115 KNMGLGDAMVKKFMAQLVEGIRYCHSHRILHRDLKPQNLLIDRDGNLK--LADFGLARAF 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122
                                                                                                                                                                                                                                                                                                                                                                                                   266
                                                                                                                                                                                                                                                                                                                                                                                                                                               298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           67 EYFNDL-----KIYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLA 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19 YKARELTHPNRI----VALKK-----IRLEAEDEGVPSTAI-REISLLKEMS-DPNIV 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7 YIDKELIYNSAISDIYTAIDKFNNLPVCLKIVDEDFSLPPHSIHREIFILKTLKPHPNII 66
                                                                                                                                                                                                                                                                                                                                                                                                 CDPHTLVPGLEEDGL-DLLEALLEYDPARRISAKQ 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KDDKEL-TNDSHVSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYPR 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NEIEEKD--IKLWLKSNSSGLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDFDICYDL 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RLLNIVHADGHKLY----LVFEFLDLDLKKYMEALPVSE-----GGRGKALPEGSALS
                                                                                                                                                                                                                                                                                                                                                                                                                                             KDWDIILPRCNDDLMKEIFTKMIRYDRSKRITSKE 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ---KPLFPGDSEIDEIF---KIFGLLGTPDETTWPGVTSFPDY----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KLPPKDEPPMAKYI-DVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSVLV 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GV-----PLRTYTHEVVTLWYRSPEILLGGRQYSTGVDMWSCGAIFAEMCTR-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  %; Pred. No. 1.6e-07;
67; Mismatches 123;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 224.5;
Pred. No. 1.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KPTFPKWKR 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      219
```

```
QΥ
                                                                                                                                                                                                                         Дb
                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; NAME/KEY: SITE ; LOCATION: (311) OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids US-10-102-806-490
                                                                                           Qy
                                                                                                                    B
                                                                                                                                                                          В
                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                 Ş
Search completed: May 29, 2002, 10:02:32 Job time: 215 sec
                                                                                                                                                                                                                                                                                                                                                                                             Query Match 12.5%; Score 224.5; DB 6; Length 527; Best Local Similarity 24.1%; Pred. No. 2.8e-07; Matches 81; Conservative 63; Mismatches 127; Indels 65; Gaps
                                                                                                                                                                                                                                                                                                                                        7 YIDKELIYNSAISDIYTAIDKFNNLPVCLKIV--DEDFSLPPHSIHREIFILKTLKPHPN 64
|| : : : | | : | | : | : | | | | | | 1
196 YIKLDKLGEGTYATVYKGKSKLTDNLVALKEIRLEHEEGAPCTAI-REVSLLKDLK-HAN 253
                                                                                                                   439 LLSHAPRLDSD-GADLLTKLLQFEGRNRISAEDAMK 473
                                                                                          300 WDIILPRCNDDLMKEIFTKMIRYDRSKRITSKEILQ 335
                                                                                                                                                                                                                                                                                   13;
```

•				
*			·	
			,	
		·		
	`			

Searched:

Run

```
Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listzing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              score greater than or equal to the score of the result being and is derived by analysis of the total score distribution.
    Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    %
Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-072-994A-14
1791
1 MKLSDYYIDKELTYNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     May 29, 2002, 09:55:26; Search time 13.07 Seconds (without alignments) 633.533 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                231628 seqs, 24425594 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MKLSDYYIDKELIYNSAISD.....IRYDRSKRITSKEILQLMLD
    DB
US-08-54-385-21
US-09-131-028A-4
US-09-131-028A-14
US-09-131-028A-19
US-08-874-347-25
US-08-874-347-25
US-08-874-347-26
US-09-093-522-26
US-09-093-522-22
US-09-093-522-22
US-09-025-580-32
US-09-025-580-32
US-09-025-580-32
US-09-025-580-32
US-09-025-580-33
US-09-025-580-33
US-09-025-580-33
US-09-025-580-33
US-09-025-580-33
US-09-025-580-33
US-09-025-580-33
US-09-025-580-31
US-09-025-580-31
US-09-025-580-31
US-09-025-580-31
US-09-025-580-31
US-09-025-580-31
US-09-025-580-31
US-09-025-580-31
US-09-025-580-31
US-08-746-788-2
US-09-025-580-31
US-08-746-788-2
US-09-025-580-30
US-09-025-580-31
US-08-746-788-2
US-09-025-580-31
US-08-746-748-3
US-08-746-748-2
US-08-746-748-3
US-08-746-748-3
US-08-746-748-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             231628
                    sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
      Sequence
  e 21, Apple e 14, Apple e 14, Apple e 25, Apple e 25, Apple e 26, Apple e 27, 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              339
  Query Match
Best Local Similarity
Matches 86; Conserv
```

Result No.

Conservative

14.7%; Score 263.5; DB 3; 23.7%; Pred. No. 7.7e-16; tive 66; Mismatches 98;

Indels Length 416;

113;

Gaps

US-08-554385-21 US-08-554385-21 US-08-554385-21 Sequence 21, Application US/08554385 Patent No. 6017692 TITLE OF INVENTION: MAX-INTERACTING PROTEINS AND TITLE OF INVENTION: MAX-INTERACTING PROTEINS AND TITLE OF INVENTION: MOLECULES AND METHODS VINENCE OF INVENTION: MOLECULES AND METHODS NUMBER OF SEQUENCES: 32 CORRESPONDENCE ADDRESS: 32 COUNTRY: U.S.A. ZIP: 02110-2804 COMPUTER READABLE FORM: MEDIUM TYPE: 3.5° Diskette, 1.44 Mb COMPUTER READABLE FORM: MEDIUM TYPE: 3.5° Diskette, 1.44 Mb COMPUTER I IBM PS/2 Model 502 or 558X OPERATING SYSTEM: MS-DOS (Version 5.0) SOFTWARE: I IBM PS/2 Model 502 or 558X OPERATING SYSTEM: MS-DOS (Version 5.1) CURRENT ADPLICATION NUMBER: US/08/54,385 PRILING DATE: NO. 6017692ember 8, 1995 CLASSIFICATION NUMBER: US/08/54,385 PRILING DATE: NO. 6017692ember 8, 1995 CLASSIFICATION NUMBER: US/08/54,385 PRILING DATE: NO. 6017692ember 8, 1995 PRILING DATE:	28 246 13.7 317 3 US-09-093-522-18 29 243.5 13.6 375 2 US-08-837-593-5 30 243 13.6 360 3 US-08-524-385-20 31 243 13.6 387 2 US-08-837-593-6 32 241 13.5 371 2 US-08-837-593-6 33 240.5 13.4 297 2 US-08-874-347-24 34 240.5 13.3 297 3 US-09-093-522-24 35 238.5 13.3 297 2 US-08-874-347-23 36 238.5 13.3 297 2 US-08-874-347-23 37 237.5 13.3 297 2 US-08-461-985-16 38 237.5 13.3 297 2 US-08-461-985-16 39 237 13.2 370 2 US-08-461-985-16 39 237 13.2 370 2 US-08-461-985-14 42 236.5 13.2 353 1 US-09-025-580-3 44 236.5 13.2 384 4 US-09-025-580-3 45 236.5 13.2 384 4 US-09-025-580-3 45 236.5 13.2 384 5 PCT-US94-08119-12
ID RELATED	Sequence 18, Appli Sequence 5, Appli Sequence 20, Appli Sequence 4, Appli Sequence 24, Appli Sequence 24, Appli Sequence 23, Appli Sequence 16, Appli Sequence 16, Appli Sequence 16, Appli Sequence 17, Appli Sequence 17, Appli Sequence 18, Appli Sequence 11, Appli Sequence 14, Appli Sequence 14, Appli Sequence 14, Appli Sequence 14, Appli Sequence 15, Appli Sequence 11, Appli Sequence 12, Appli Sequence 13, Appli Sequence 15, Appli Sequence 15, Appli Sequence 3, Appli Sequence 12, Appli

```
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Lemmel, Steven A.
APPLICANT: Leenmel, Steven A.
APPLICANT: Leenmel, Steven A.
APPLICANT: Leenmel, Steven A.
APPLICANT: Chaudhary, Sunita
TITLE OF INVENTION: BETA-CASEIN EXPRESSING CONSTRUCTS
FILE REFERENCE: 6004.US.Pl
CURRENT APPLICATION NUMBER: US/09/131,028A
CURRENT FILING DATE: 1998-08-07
PRIOR APPLICATION NUMBER: US 08/064,440
PRIOR FILING DATE: 1993-05-21
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 D, 09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
               δõ
                                                뫄
                                                                          δõ
                                                                                                           Вb
                                                                                                                                           Qy
                                                                                                                                                                              Дb
                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                                                                  ; TYPE: PRT
; ORGANISM: HOMO
US-09-131-028A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 2
US-09-131-028A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 4, Application US/09131028A Patent No. 6287866 GENERAL INFORMATION:
                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      296 DAL 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   79 R-HENLICLQDIFSPLE--NDIYFVTELQGTDLHRLLQ-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19
                                                                                                                  94
                                                                                                                                                                                   38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N
                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 K----DVINTICSENTLKFVTSLPHRDPIPFSERFKTVEPDAVDLLEKMLVFDPKKRITAA 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     YDLKLPPKDEPPMAKYIDVSTGIYKAPELILGITUYEYEIDIWSLGIILTGLYSENFQSV 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EIL 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -DFGLARIQDPQMTGY--VSTRYYRAPEIMLTWQKYDVEVDIWSAGCI----FAEMIEGK 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----TRPLEKQFVQYFLYQILRGLKYVHSAGVIHRDLKPSNILINEN-----CDLKIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RKDWDIILPRCNDDLMK----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FLFPGKD----HVHQFSIITDL---LGSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LVKDDKELTNDSHVSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYP 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QYTLANEIEEKDIKLWLKSMSSGLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDFDIC 176
DEPPMAKYIDVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLY--SENFQSVLVKDDK 242
                                                  TDYDIRFYMYEILKALDYCHSMGIMHRDVKPHNVMIDHEHRKLRLI------DWGLAEF
                                                                     EEKDIKLMLKSMSSGLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDFDICYDLKLPPK 184
                                                                                                                  IITLADIVK--DPV
                                                                                                                                              IIEYFNDLKIYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLANEI 124
                                                                                                                                                                                   DYQLVRKL-GRGKYSEVFEAINITNNEKVVVKILK---PVKKKKIKREIKILENLRGGPN
                                                                                                                                                                                                             DYYIDKELIYNSAISDIYTAIDKFNNLPVCLKIVDEDFSLPPHSIHREIFILKTLKPHPN 64
                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                     14.6%; Score 262; DB 4; I 26.5%; Pred. No. 9.7e-16; tive 59; Mismatches 125;
                                                                                                                      SRTPALVFEHVNNTDFKQ--LYQTL 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----EIFTKMIRYDRSKRITSK 331
                                                                                                                                                                                                                                                                                   Length 391;
                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 1 1 1 1 1 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        --P
                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      59
                                                                                                                                                                                      93
                                                     181
                                                                                                                                                                                                                                                         13;
```

; Sequence 25, Application U
; Patent No. 5863741
; GENERAL INFORMATION:
APPLICANT: Limper, And
; APPLICANT: Leof, Edwar

APPLICANT:

Limper, Andrew H. Leof, Edward B. Thomas, Charles F RESULT 4 US-08-874-347-25

US/08874347

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Вþ
                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Thehes 90; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-131-028A-14
                               Qγ
                                                                   DЬ
                                                                                                   Qy
                                                                                                                                          밁
                                                                                                                                                                          Qy
                                                                                                                                                                                                              В
                                                                                                                                                                                                                                             Qγ
                                                                                                                                                                                                                                                                                     Вþ
                                                                                                                                                                                                                                                                                                                 QУ
                                                                                                                                                                                                                                                                                                                                                          Ъ
                                                                                                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: HOMO US-09-131-028A-14
 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 14
LENGTH: 391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 14, Application US/09131028A Patent No. 6287866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Chaudhary, Sunita
TITLE OF INVENTION: BETA-CASEIN EXPRESSING
FILE REFERENCE: 6004.US.pl
CURRENT APPLICATION NUMBER: US/09/131,028A
CURRENT FILING DATE: 1998-08-07
PRIOR APPLICATION NUMBER: US 08/064,440
PRIOR APPLICATION ST. 1993-05-21
NUMBER OF SEQ ID NOS: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Lemmel, Steven A.
APPLICANT: Leonard, Amanda Eu
APPLICANT: Chaudhary, Sunita
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                        243
                                                                                                                                                                                                               129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          182 YHPGQEYNVRVASRYFKGPELLVDYQMYDYSLDMWSLGCMLASMIFRKEPF---
281
                                 300 WDIILPRCNDDLMK----EIFTKMIRYDRSKRITSKEILQ 335
                                                                     233
                                                                                                                                          182
                                                                                                                                                                              185
                                                                                                                                                                                                                                                 125
                                                                                                                                                                                                                                                                                     94
                                                                                                                                                                                                                                                                                                                        65
                                                                                                                                                                                                                                                                                                                                                          38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WDIILPRCNDDLMK----EIFTKMIRYDRSKRITSKEILQ 335
                                                                                                                                                                                                              TDYDIRFYMYEILKALDYCHSMGIMHRDVKPHNVMIDHEHRKLRLI-----DWGLAEF
                                                                                                                                                                                                                                                                                                                     IIEYFNDLKIYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLANEI 124
                                                                                                                                                                                                                                                                                                                                                          DYQLVRKL-GRGKYSEVFEAINITNNEKVVVKILK----PVKKKKIKREIKILENLRGGPN 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WERFVHSENQHLVSPEALDFLDKLLRYDHQSRLTAREAME 320
                                                                     ----FHGHDNYDQLVRIAKVLGTEDLYD-----YIDKYNIE--LDPRFNDILGRHSRKR
                                                                                                                                                                                                                                                                                                                                                                                              DYYIDKELIYNSAISDIYTAIDKFNNLPVCLKIVDEDFSLPPHSIHREIFILKTLKPHPN 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----FHGHDNYDQLVRIAKVLGTEDLYD-----YIDKYNIE--LDPRFNDILGRHSRKR 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ELTNDSHVSDLY-LLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFN--LQKYPRKD 299
                                                                                                                                                             DEPPMAKYIDVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLY--SENFQSVLVKDDK 242
                                                                                                                                                                                                                                  IITLADIVK--DPV-----
WERFVHSENQHLVSPEALDFLDKLLRYDHQSRLTAREAME 320
                                                                                         ELTINDSHVSDLY-LLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFN--LQKYPRKD 299
                                                                                                                                          YHPGQEYNVRVASRYFKGPELLVDYQMYDYSLDMWSLGCMLASMIFRKEPF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Leonard, Amanda Eun-Yeong
                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                14.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                               ; Score 262; DB 4; ; pred. No. 9.7e-16; 59; Mismatches 125;
                                                                                                                                                                                                                                                                                         -----SRTPALVFEHVNNTDFKQ--LYQTL 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CONSTRUCTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 391;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                   66;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 232
                                                                                                                                                                                                                   181
                                                                                                                                                232
                                                                                                                                                                                                                                                                                                                                                                                                                                     13;
```

```
US-08-969-106-2

; Sequence 2, Application US/08969106

; Patent No. 5986055

; Patent No. 5986055
                                                                                                                                                                                   Q
                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                             ç,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: protein
US-08-874-347-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 298 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Ellinger, Mark S.
REGISTRATION NUMBER: 34,812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Gustafson, Michael P. TITLE OF INVENTION: CDC2 PROTEIN TITLE OF INVENTION: CARINII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 07/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-335-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 2
APPLICANT: Yang, M.
                                                                                                                                                                                     318
                                                                                                                                                                                                                                                                                                                                                                               114
                                                                                                                                                                                                                                                                                                                                                                                                   139 GLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDEDICYDLKLPPKDEPPMAKYI-DVST 197
                                                                                                                                                   265 QMLHYDPNKRISAKAAL 281
                                                                                                                                                                                                                            214
                                                                                                                                                                                                                                                                                                      166 LWYRAPEILLGSKYYSTAVDIWSLGCIF-
                                                                                                                                                                                                                                                                                                                                         198 GIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSVLVKDDKELTNDSHVSDLYLLN 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/0 FILING DATE: 13-JUN-1997 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 60 South : CITY: Minneapolis STATE: MN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: UZIP: 55402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       / Match 14.6%; Score 261; DB 2; Local Similarity 26.2%; Pred. No. 8.2e-16; les 83; Conservative 59; Mismatches 119;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18 VYKARNKLTGEVVALKKIRLDTETEGVPSTAIREISLLKELN-HPNIVKLLDVIHTENKL 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 IYTAIDKFNNLPVCLKIV--DEDFSLPPHSIHREIFILKTLKPHPNIIEYFNDLKIYDDV 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 612-288-9696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                         KMIRYDRSKRITSKEIL 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                        YLVFEFLHQDLKKFMDASA-----LTGIPLPL-----IKSYLFQLLQ 113
                                                                                                                                                                                                                            RIFRTLGTPDEVVWPGVTSMPDY-----
                                                                                                                                                                                                                                                              QIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYPRKDWDIILPRCNDDLMKEIFT 317
                                                                                                                                                                                                                                                                                                                                                                             GLAFCHSHRVLHRDLKPQNLLINTEGAIK--LADFGLARAFGV-----PVRTYTHEVVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLANEIEEKDIKLWLKSMSS 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E: Fish & Richardson P.C., P.A. 60 South Sixth Street, Suite 3300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 298 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              single
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E: Diskette
IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US/08/874,347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07039/055001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KINASE FROM PNEUMOCYSTIS
                                                                                                                                                                                                                            --KPSFPKWARQDFSKVVPPLDED-GRSLLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.0
                                                                                                                                                                                                                                                                                                      AEMVTRRALFPGDSEIDQLF---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 298;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                    213
                                                                                                                                                                                                                                                                                                                                                                                 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11;
```

```
ДЬ
                                                                                                                                                                                                                     δõ
                                                                                                                                                                                                                                                          멍
                                                                                                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                                                                                                                          DЬ
                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                              Db
                                                                             VΩ
                                                                                                                 밁
                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-969-106-2
RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 212-869-9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: CD NUMBER OF SEQUENCES: 1 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION: TELEPHONE: 212-790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                            139 GLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDFDICYDLKLPPKDEPPMAKYI-DVST 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH:
TYPE: a
                                                 265 QMLHYDPNKRISAKAAL 281
                                                                                318 KMIRYDRSKRITSKEIL 334
                                                                                                                 214 RIFRTLGTPDEVVWPGVTSMPDY-----
                                                                                                                                                   258 QIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYPRKDWDIILPRCNDDLMKEIFT 317
                                                                                                                                                                                      166 LWYRAPEILLGSKYYSTAVDIWSLGCIF---
                                                                                                                                                                                                        198 GIYKAPELIIGITNYEYEIDIWSLGIILTGLYSENFQSVLVKDDKELTNDSHVSDLYLLN 257
                                                                                                                                                                                                                                                          114 GLAFCHSHRVLHRDLKPQNLLINTEGAIK--LADFGLARAFGV-----PVRTYTHEVVT 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 13-NOV CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 1155 A
CITY: New York
STATE: New Yor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: un
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Misrock, S. Leslie
REGISTRATION NUMBER: 18,
                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 26.2
nes 83; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                              77 YLVFEFLHQDLKKFMDASA------LTGIPLPL------IKSYLFQLLQ 113
                                                                                                                                                                                                                                                                                                                                                             79 ILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLANEIEEKDIKLWLKSMSS 138
                                                                                                                                                                                                                                                                                                                                                                                                18 VYKARNKLTGEVVALKKIRLDTETEGVPSTAIREISLLKELN-HPNIVKLLDVIHTENKL 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g: 298 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nandabalan, K. Schulz, V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pennie & Edmonds LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDK2 INTERACTIONS
15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                us/08/969,106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18,872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 261; DB 2;
Pred. No. 8.2e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7934-057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                   -KPSFPKWARQDFSKVVPPLDED-GRSLLS
                                                                                                                                                                                       ---AEMVTRRALFPGDSEIDQLF---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 298;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
```

11;

US-09-093-522-25 Sequence 25, Application US/09093522 Patent No. 6015700 GENERAL INFORMATION:

213

APPLICANT:

Limper, Andrew H

APPLICANT:

Leof, Edward

В

Charles F.

```
δÃ
                                                                                                                                                                                                                                                                                                   δÃ
밁
                              Q
                                                                В
                                                                                                QΥ
                                                                                                                                     밁
                                                                                                                                                                 γ
                                                                                                                                                                                                     Ъ
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                                                                                                                                                                       ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-093-522-25
                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/874

FILING DATE: 13-UN-1997

ATTORNEY_AGENT INFORMATION:

NAME: Ellinger, Mark S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: GUSTAÍSON, MICHAEL P.
TITLE OF INVENTION: CDC2 PROTEIN KINASE FROM PNEUMOCYSTIS
TITLE OF INVENTION: CARINII
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/093,522 FILING DATE: 08-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 298 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Ellinger, Mark S.
REGISTRATION NUMBER: 34,812
REFERENCE/DOCKET NUMBER: 07/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-335-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: protein
265
                                 318 KMIRYDRSKRITSKEIL 334
                                                                   214 RIFRTLGTPDEVVWPGVTSMPDY
                                                                                     166 LWYRAPEILLGSKYYSTAVDIWSLGCIF--
                                                                                                                                                                                                       114 GLAFCHSHRVLHRDLKPQNLLINTEGAIK--LADFGLARAFGV-----PVRTYTHEVVT
                                                                                                                                                                                                                          | 139 GLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDFDICYDLKLPPKDEPPMAKYI-DVST 197
                                                                                                                                                                     198 GIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSVLVKDDKELTNDSHVSDLYLLN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
STRANDEDNESS: sir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM Compatible OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Minneapolis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
                                                                                                                                                                                                                                                                         77 YLVFEFLHQDLKKFMDASA-------LTGIPLPL-----IKSYLFQLLQ 113
                                                                                                                                                                                                                                                                                                         79 ILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLANEIEEKDIKLWLKSMSS 138
                                                                                                                                                                                                                                                                                                                                            18 VYKARNKLTGEVVALKKIRLDTETEGVPSTAIREISLLKELN-HPNIVKLLDVIHTENKL
                                                                                                                                                                                                                                                                                                                                                                           21 IYTAIDKFNNLPVCLKIV--DEDFSLPPHSIHREIFILKTLKPHPNIIEYFNDLKIYDDV
                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
QMLHYDPNKRISAKAAL 281
                                                                                                                                                                                                                                                                                                                                                                                                              83;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         55402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         E: Fish & Richardson P.C., P.A. 60 South Sixth Street, Suite 3300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                298 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     612-288-9696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                              14.6%;
26.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08/874,347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25:
                                                                                                                                                                                                                                                                                                                                                                                                            59; Mismatches 119;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07039/055002
                                                                                                                                                                                                                                                                                                                                                                                                                              Score 261; DB 3;
Pred. No. 8.2e-16;
                                                                   KPSFPKWARQDFSKVVPPLDED-GRSLLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.0
                                                                                                                                         -AEMVTRRALFPGDSEIDQLF---
                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 298;
                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                  56;
                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                          257
                                                                                                                                                                                                            165
                                                                                                                                                                                                                                                                                                                                              76
                                                                                                                                                                                                                                                                                                                                                                              78
                                                                                                                                         213
                                                                                                                                                                                                                                                                                                                                                                                                                  11;
```

RESULT

```
Qγ
                                                                           밁
                                                                                                         Qy
                                                                                                                                                   ДЬ
                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                               DЬ
                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                         QУ
                                                                                                                                                                                                                                                                                                                                                                                   Db
                                                                                                                                                                                                                                                                                                                                                                                                                     οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TOPOLOGY: 1i
; MOLECULE TYPE:
US-08-874-347-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-874-347-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 26, Application US/08874347 Patent No. 5863741
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPERATING SYSTEM: DOS
SOFTWARE: FASLSEQ for Windows Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/874,347
FILING DATE: 13-JUN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: CDC2 PROTITLE OF INVENTION: CARINII NUMBER OF SEQUENCES: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Thomas, Charles F. APPLICANT: Gustafson, Michael P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION: 612-335-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Leof, Edward B.
APPLICANT: Thomas, Charles F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                 104
249 LATIVPTL-DPAGLDLLSKMLRYEPNKRITARQALE 283
                                 300 WDIILPRCNDDLMKEIFTKMIRYDRSKRITSKEILQ 335
                                                                           200
                                                                                                                                                       154
                                                                                                                                                                                             180
                                                                                                                                                                                                                                                     121 ANEIEEKDIKLWLKSMSSGLEFIHSQGIIHRDIKPSNIFFARDDITQPI-IGDFDICYDL 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Ellinger, Mark S.
REGISTRATION NUMBER: 34,812
REFERENCE/DOCKET NUMBER: 07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 60 South : CITY: Minneapolis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                             62 HPNIIEYFNDLKIYDDVILVTKLYRYDLSQLIE-ITKYCKRTTRFIYGINGNLVSNQYTL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEX:
                                                                                                                                                                                                                                                                                                         60 HGNIVRLHDVIHSEKRIYLVFEYLDLDLKKFMDSCPEFAKNPTL----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 612-288-9696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                     N
                                                                                                                                                                                                                                                                                                                                                                                                                         5 DYYIDKELIYNSAISDIYTAIDKFNNLPVCLK---IVDEDFSLPPHSIHREIFILKTLKP 61
                                                                                                                                                       GIPVRTFTH-----EVVTLWYRAPEILLGSRQYSTPVDMWSVGCIF---
                                                                           QKPLFPGDSEIDELF - - - KIFRVLGTPNEQSWPGVSSLPDY - -
                                                                                                             DDKELINDSHVSDLYLLNQIFENFGTPNLTDFEDELFCDEVNNENLHFKKFNLQKYPRKD 299
                                                                                                                                                                                         KLPPKDEPPMAKYIDVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSVLVK 239
                                                                                                                                                                                                                                 -----IKSYLYQILRGVAYCHSHRVLHRDLKPQNLLI--DRRTNALKLADFGLARAF
                                                                                                                                                                                                                                                                                                                                                                                     EQYEKEEKIGEGTYGVVYRARDKVTNETIALKKIRLEQEDEGVPSTAI-REISLLKEMH- 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       55402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E: Fish & Richardson P.C., P.A. 60 South Sixth Street, Suite 3300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      294 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Limper, Andrew H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDC2 PROTEIN KINASE FROM PNEUMOCYSTIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                              14.4%; Score 258.5; DB 2; 25.3%; Pred. No. 1.4e-15; tive 60; Mismatches 132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07039/055001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 294;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                               KSAFPKWQAQD
                                                                                                                                                                                                                                                                                                               ------
                                                                                                                                                         ----AEMVN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                     153
                                                                               248
                                                                                                                                                                                                                                                                                                               103
```

```
δÃ
                                                                    В
                                                                                                  Qy
                                                                                                                                     Вb
                                                                                                                                                               δÃ
                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                   ρy
                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-093-522-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 8
US-09-093-522-26
                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2
Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 294 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Ellinger, Mark S.
REGISTION NUMBER: 34,812
REFERENCE/DOCKET NUMBER: 070
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-335-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Gustafson, Michael P.
TITLE OF INVENTION: CDC2 PROTEIN KINASE FROM PNEUMOCYSTIS
TITLE OF INVENTION: CARINII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 13-JUN-1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
PRIOR APPLICATION DATA:
                             240 DDKELTNDSHVSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYPRKD 299
                                                                                  180 KLPPKDEPPMAKYIDVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSVLVK 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Limper, Andre APPLICANT: Leof, Edward
200 QKPLFPGDSEIDELF---KIFRVLGTPNEQSWPGVSSLPDY---
                                                                                                                                        104
                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                       60
                                                                                                                                                                                                                                         62
                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 60 South SCITY: Minneapolis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 612-288-9696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 08-JUN
                                                                                                                                                                                                                                                               2 EQYEKEEKIGEGTYGVVYRARDKVTNETIALKKIRLEQEDEGVPSTAI-REISLLKEMH-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                             ANEIEEKDIKLWLKSMSSGLEFIHSQGIIHRDIKPSNIFFARDDITQPI-IGDFDICYDL 179
                                                                                                                              -----IKSYLYQILRGVAYCHSHRVLHRDLKPQNLLI--DRRTNALKLADFGLARAF 153
                                                                                                                                                                                                                                HPNIIEYFNDLKIYDDVILYTKLYRYDLSQLIE-ITKYCKRTTRFIYGINGNLVSNQYTL 120
                                                                GIPVRTFTH-----EVVTLWYRAPEILLGSRQYSTPVDMWSVGCIF-
                                                                                                                                                                                                HGNIVRLHDVIHSEKRIYLVFEYLDLDLKKFMDSCPEFAKNPTL----------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26, Application US/09093522
b. 6015700
                                                                                                                                                                                                                                                                                                                                       Similarity
85; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                55402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ĭ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E: Fish & Richardson P.C., P.A. 60 South Sixth Street, Suite 3300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              USA
                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Thomas, Charles F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                        protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Andrew
                                                                                                                                                                                                                                                                                                                                                     14.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/09/093,522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08/874,347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26:
                                                                                                                                                                                                                                                                                                                                    ; Score 258.5; DB 3;
; Pred. No. 1.4e-15;
60; Mismatches 132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07039/055002
----KSAFPKWQAQD 248
                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                Length 294;
                                                               ---AEMVN 199
                                                                                                                                                                                                                                                                                                                                    59;
                                                                                                                                                                                                                                                                                                                                  12;
```

```
Вþ
                                                                                                                Вb
                                                                                                                                                νQ
         Q
                                                                            QУ
                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                          B
                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                    ; TOPOLOGY: 1:
; MOLECULE TYPE:
US-08-874-347-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-874-347-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 22, Application US/08874347 Patent No. 5863741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Ellinger, Mark S.
REGISTRATION NUMBER: 34,812
REFERENCE/DOCKET NUMBER: 07/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-335-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 55402
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SENDING:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C., P.
ADDRESSEE: Fish Sixth Street, Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/01
FILING DATE: 13-JUN-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Limper, Andrew H.
APPLICANT: Leof, Edward B.
APPLICANT: Thomas, Charles F.
APPLICANT: Gustafson, Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Gustafson
TITLE OF INVENTION:
TITLE OF INVENTION:
         243
                                                                                                                  106
                                                                                                                                                   124
                                                                              184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           249 LATIVPTL-DPAGLDLLSKMLRYEPNKRITARQALE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300 WDIILPRCNDDLMKEIFTKMIRYDRSKRITSKEILQ
                                                                                                                                                                                       63
                                                                                                                                                                                                               64 NIIEYFNDLKIYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLANE 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 60 South & CITY: Minneapolis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH:
                                                                                                                                                                                                                                                                                      7 YIDKELIYNSAISDIYTAIDKFNNLPVCLK---IVDEDFSLPPHSIHREIFILKTLKPHP 63
ELTNDSHYSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYPRKDWDI 302
                                                                                                                                          IEEKDIKLWLKSMSSGLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDFDICYDLKLPP 183
                                                                                                                                                                             N---RSNCVRLLDILHAESKLYLVFEFLDMDLKKYMDRISE-----TGATS 105
                                                                                                                                                                                                                                                     YQKVEKIGEGTYGVVYKARHKLSGRIVAMKKIRLEDESEGVPSTAI-REISLLKEVNDEN 62
                                     ----PLRNYTHEIVTLWYRAPEVLLGSRHYSTGVDIWSVGCIF-----AEMIRRSP 208
                                                                   KDEPPMAKYI-DVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSVLVKDDK 242
                                                                                                          LDPRLVQKFTYQLVNGVNFCHSRRIIHRDLKPQNLLIDKEGNLK--LADFGLARSFGV--
                                                                                                                                                                                                                                                                                                                              81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   612-288-9696
                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                      protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      single
                                                                                                                                                                                                                                                                                                                        14.3%; Score 255.5; DB 2; 24.3%; Pred. No. 2.6e-15; ative 70; Mismatches 131;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDC2 PROTEIN KINASE FROM PNEUMOCYSTIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/874,347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07039/055001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .A.
3300
                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                             Length 297;
                                                                                                                                                                                                                                                                                                                          51;
                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                          161
                                                                                                                                                                                                                                                                                                                          11;
```

```
RESULT 10
US-09-093-522-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뭥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                               Qy
                                                                      밁
                                                                                                  δÃ
                                                                                                                                          DЬ
문
                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                                       us-09-093-522-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2
Patent No.
                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/874,347
FILING DATE: 13-JUN-1997
ATTORNEY/AGENT INFORMATION:
NAME: Ellinger, mark S.
REGISTRATION NUMBER: 34,812
REFERENCE/DOCKET NUMBER: 07039/0
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-335-5070
                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Thomas, Charles F.
APPLICANT: Gustafson, Michael P.
TITLE OF INVENTION: CDC2 PROTEIN KINASE FROM PNEUMOCYSTIS
TITLE OF INVENTION: CARINII
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Wil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                      TOPOLOGY: 1: MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        258 VVPNGEEDAI-ELLSAMLVYDPAHRISAKRALQ 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            209
 106 LDPRLVQKFTYQLVNGVNFCHSRRIIHRDLKPQNLLIDKEGNLK--LADFGLARSFGV-- 161
                                 124 IEEKDIKLWLKSMSSGLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDFDICYDLKLPP 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Minneapolis
STATE: MN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 08-JUI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET:
                                                                                                       64
                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
                                                                                                                                              4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NIIEYFNDLKIYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLANE 123
                                                                                                                                                                               YIDKELIYNSAISDIYTAIDKFNNLPVCLK---IVDEDFSLPPHSIHREIFILKTLKPHP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ILPRCNDDLMKEIFTKMIRYDRSKRITSKEILQ 335
                                                                      N---RSNCVRLLDILHAESKLYLVFEFLDMDLKKYMDRISE---
                                                                                                                                            YQKVEKIGEGTYGVVYKARHKLSGRIVAMKKIRLEDESEGVPSTAI-REISLLKEVNDEN 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22, Application US/09093522
), 6015700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      55402
                                                                                                                                                                                                                                                                                                                                                                          amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E: Fish & Richardson P.C., P.A. 60 South Sixth Street, Suite 3300
                                                                                                                                                                                                                                                                                                                                                                                            297
                                                                                                                                                                                                                                                                                                                                                                                                                                                               612-288-9696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Limper,
                                                                                                                                                                                                                                                                                                                                       ss: single
linear
                                                                                                                                                                                                                                                                                                                      protein
                                                                                                                                                                                                                                                                                                                                                                                           amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Edward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Andrew H.
                                                                                                                                                                                                             14.3%; score 255.5; DB 3; 24.3%; Pred. No. 2.6e-15; ative 70; Mismatches 131;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/09/093,522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07039/055002
                                                                                                                                                                                                                                                Length 297;
                                                                                                                                                                                                                  Indels
                                                                         ----TGATS 105
                                                                                                                                                                                                                  51;
                                                                                                                                                                                                                Gaps
                                                                                                                                                                                 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              257
                                                                                                                                                                                                                    11;
```

```
Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                ; TOPOLOGY: linear; MOLECULE TYPE: protein US-09-025-580-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-025-580-29
 밁
                               Q
                                                                   뫄
                                                                                                  Qγ
                                                                                                                                      Вр
                                                                                                                                                                       γQ
                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 92; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2 Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (212)
INFORMATION FOR SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Wilson, Ke
APPLICANT: Germann, U
TITLE OF INVENTION: M
TITLE OF INVENTION: S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: VF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Haley, James F.
REGISTRATION NUMBER: 27,794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                  133 LKSMSSGLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDFDI----CYDLKLPPKDEPP 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     258 VVPNGEEDAI-ELLSAMLVYDPAHRISAKRALQ 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    303 ILPRCNDDLMKEIFTKMIRYDRSKRITSKEILQ 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      209 LFPGDSEIDEIF---KIFQVLGTPNEEVWPGVTLLQDYKSTFPRWKRMDLHK---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           184 KDEPPMAKYI-DVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSVLVKDDK 242
 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/025,580 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: New York
                                                                                                      73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
                                                                                                                                      40 VCAAFDTVLGISVAVKKLSRPFQNQTHAKRAYRELVLLKCVN-HKNIISLLNVFTPQKTL 98
                                                                                                                                                                         21 IYTAIDKFNNLPVCLKIVDEDFSLPPHS--IHREIFILKTLKPHPNIIEYFN-----DL 72
                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                  LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ELTNDSHVSDLYLLNQIFENEGTPNLTDFEDELECDEYNNENLHFKKENLQKYPRKDWDI 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----PLRNYTHEIVTLWYRAPEVLLGSRHYSTGVDIWSVGCIF---
LYQMLCGIKHLHSAGIIHRDLKPSNI-VVKSDCTLKIL-DFGLARTACTNFMMTPY----
                                                                                                    KIYDDVILYTKLYRYDLSQLIEITKYCKRTTRF1YGINGNLVSNQYTLANEIEEKDIKLW 132
                                                                     EEFQDVYLVMELMDANLCQVIHM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29, Application US/09025580
o. 6162613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10020
                                                                                                                                                                                                                                                                                                                                                                 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ΝY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1251 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                  382 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wilson, Keith Phillip
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Su, Michael Shin-San
                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fish & Neave
                                                                                                                                                                                                                                                                                                                                                                                                                                                         (212)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ted
                                                                                                                                                                                                                                                                                                                                                   single
                                                                                                                                                                                                                                                                                                                                                                                                                        ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                       596-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                           596-9000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ursula A.

Methods For Designing Inhibitors of
Serine/Thereonine Kinases and Tyros.
37
                                                                                                                                                                                                                            14.3%; Score 255.5; DB 4 27.1%; Pred. No. 3.6e-15;
                                                                                                                                                                                                              49; Mismatches 112;
                                                                                                                                                                                                                                                                                                                                                                                                                          29:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97-104
                                                                                                                                                                                                                                              DB 4;
                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tyrosine Kinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ---AEMIRRSP
                                                                       ELDHERMSYL 131
                                                                                                                                                                                                                                                  382;
                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          257
                                                                                                                                                                                                               16;
```

```
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-209-668-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 12
US-09-209-668-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                           RESULT 13
PCT-US94-12913A-18
                                                                                                                                                                                                                                                                   Ω
                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                               상 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           дg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Monia, Brett P.
APPLICANT: XU, XiaoXing S.
APPLICANT: XU, XiaoXing S.
TITLE OF INVENTION: METHODS OF MODULATING TUMOR NECROSIS FACTOR
TITLE OF INVENTION: Alpha-INDUCED EXPRESSION OF CELL ADHESION MOLECULES
FILE REFERENCE: ISPH-0336
CURRENT APPLICATION NUMBER: US/09/209,668A
CURRENT FILING DATE: 1998-12-10
NUMBER OF SEQ ID NOS: 25
SOFTMARE: Patentin Ver. 2.0
SEQ ID NO 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 14.3
Best Local Similarity 27.1
Matches 92; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17, Application US/09209668A Patent No. 6114517
                                                                                                        Sequence 18, Application PC/TUS9412913A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH:
                                                              APPLICANT:
  APPLICANT:
                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      189 MAKYIDVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSVLYKDDKELTNDS
                                                                                                                                                                                                                                                                                                                                                                                                                                            189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   302 IILP-----RCNDDLMKEIFTKMIRYDRSKRITSKEILQ 335
                                                                                                                                                                                                                                  279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                279 -IFPSESERDKIKTSQARDLLSKMLVIDPDKRISVDEALR 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                        IILP-----RCNDDLMKEIFTKMIRYDRSKRITSKEILQ 335
                                                                                                                                                                                                                                                                                                                  HIDQ---WNKVIEQLGTPS-AEFMKKLQPTVRNYVE-----NRPKYPGIKFEELFPDW- 278
                                                                                                                                                                                                                                                                                                                                                                                                                      MAKYIDVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSVLVKDDKELTNDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LKSMSSGLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDFDI----CYDLKLPPKDEPP 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EEFQDVYLVMELMDANLCQVIHM---------ELDHERMSYL 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KIYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLANEIEEKDIKLW 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VCAAFDTVLGISVAVKKLSRPFQNQTHAKRAYRELVLLKCVN-HKNIISLLNVFTPQKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IYTAIDKFNULPVCLKIVDEDFSLPPHS--IHREIFILKTLKPHPNIIEYFN-----DL: | | : | | : | | | | | | | | |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HIDQ---WNKVIEQLGTPS-AEFMKKLQPTVRNYVE-----NRPKYPGIKFEELFPDW- 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -----VVTRYYRAPEVILGM-GYKENVDIWSVGCIM------GELVKGCVIFQGTD 229
                                                                                                                                                                                                                                                                                                                                                        HVSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYPR-----KDWD 301
                                                                                                                                                                                                                                                                                                                                                                                                -----VVTRYYRAPEVILGM-GYKENVDIWSVGCIM------GELVKGCVIFQGTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LYOMLCGIKHLHSAGIIHRDLKPSNI-VVKSDCTLKIL-DFGLARTACTNFMMTPY----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HVSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYPR-----KDWD 301
                                                                                                                                                                                                                                  -IFPSESERDKIKTSQARDLLSKMLVIDPDKRISVDEALR 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    424
Karin, Michael
Davis, Roger
Hibi, Masahiko
                                                              THE REGENTS OF THE UNIVERSITY OF CALIFORNIA UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14.3%; Score 255.5; DB 3; 27.1%; Pred. No. 4.1e-15; tive 49; Mismatches 112;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 424;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                  229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98
                                                                                                                                                                                                                                                                                                                                                                                                                                        248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16;
```

```
RESULT 14
US-09-025-580-32
; Sequence 32, Application
; Patent No. 6162613
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                     QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ъ
                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCT-US94-12913A-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: PCT/US94/08
FILING DATE: 18-JUL-1994
ATTORNEY/AGENT INFORMATION:
NAME: LISA A. HAILE, PH.D.
REGISTRATION NUMBER: P-38,347
REFERENCE/DOCKET NUMBER: FD-320
TELECOMMUNICATION INFORMATION:
TELEPAN: (619) 455-5110
INFORMATION FOR SEQ ID NO: 18:
GEOTEMAC CHARACTERICS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/12913A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Spensley Horn Jubas & Lubitz
STREET: 1880 Century Park East, Suite 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Lin, Anning
APPLICANT: Derijard, Benoit
TITLE OF INVENTION: ONCOPROTEIN PROTEIN KINASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 424 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                            230
                                                                                                                                                                                                                                                                                                                                                                                                                132 LYQMLCGIKHLHSAGIIHRDLKPSNI-VVKSDCTLKIL-DFGLARTACTNFMMTPY----
                                                                                                                                                                                                                                                                                                                                                                                                                                        133 LKSMSSGLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDFDI----CYDLKLPPKDEPP 188
                                                                                                                                                                                                                                                                                   249 HVSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYPR------KDWD 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 1880 Centu
CITY: Los Angeles
STATE: California
                                                                                                                                                                                                302 IILP-----RCNDDLMKEIFTKMIRYDRSKRITSKEILQ 335
                                                                                                                                                                                                                                                                                                                               186 -----VVTRYYRAPEVILGM-GYKENVDIWSVGCIM------GELVKGCVIFQGTD 229
                                                                                                                                                                                                                                                                                                                                                                    189 MAKYIDVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSVLVKDDKELTNDS 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 424 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              73 KIYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLANEIEEKDIKLW 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          40 VCAAFDTVLGISVAVKKLSRPFQNQTHAKRAYRELVLLKCVN-HKNIISLLNVFTPQKTL 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21 IYTAIDKFNNLPVCLKIVDEDFSLPPHS--IHREIFILKTLKPHPNTIEYFN-----DL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                      -IFPSESERDKIKTSQARDLLSKMLVIDPDKRISVDEALR 317
                                                                                                                                                                                                                                            HIDQ---WNKVIEQLGTPS-AEFMKKLQPTVRNYVE-----NRPKYPGIKFEELFPDW-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EEFQDVYLVMELMDANLCQVIHM----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          90067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14.3%; Score 255.5; DB 5; 27.1%; Pred. No. 4.1e-15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PCT/US94/08119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FD-3205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches 112;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----ELDHERMSYL 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 424;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
```

US/09025580

185

72

```
В
                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                                                                                                                                                       δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                            멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-025-580-32
                                    RESULT 15
US-09-025-580-27
                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                       ρ
                                                                                                                                                                              멍
                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 92
Sequence 27, Application US/09025580 Patent No. 6162613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: Haley, James F.
NAME: Haley, James F.
27,794
REGISTRATION NUMBER: 27,794
REFERENCE/DOCKET NUMBER: VPI
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 596-9000
TELEPHONE: (212) 596-9000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (212) 596-9090 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Su, Michael Shin-San
APPLICANT: Fox, Ted
APPLICANT: Wilson, Keith Phillip
APPLICANT: Germann, Ursula A.
TITLE OF INVENTION: Methods For Designing Inhibitors of
TITLE OF INVENTION: Serine/Thereonine Kinases and Tyrosine Kinase
NUMBER OF SEQUENCES: 37
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compa
OPERATING SYSTEM: PC-D
SOFTWARE: PatentIn Rel
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET:
                                                                                                                                                                                                                                                                                                                    189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Fish & Neave
STREET: 1251 Avenue of the Americas
CITY: New York
                                                                                                          279 -IFPSESERDKIKTSQARDLLSKMLVIDPDKRISVDEALR 317
                                                                                                                                           302 IILP-----RCNDDLMKEIFTKMIRYDRSKRITSKEILQ 335
                                                                                                                                                                                230 HIDQ---WNKVIEQLGTPS-AEFMKKLQPTVRNYVE-----NRPKYPGIKFEELFPDW-
                                                                                                                                                                                                                                                                                                                                                                                                                                                            40 VCAAFDTVLGINVAVKKLSRPFQNQTHAKRAYRELVLLKCVN-HKNIISLLNVFTPQKTL 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                               73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21 IYTAIDKFNNLPVCLKIVDEDFSLPPHS--IHREIFILKTLKPHPNIIEYFN-----DL 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity es 92; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
                                                                                                                                                                                                                 HVSDLYLLNQIFENFGTPNLTDFEDELFCDEYNNENLHFKKFNLQKYPR-----KDWD
                                                                                                                                                                                                                                                                                     MAKYIDVSTGIYKAPELILGITNYEYEIDIWSLGIILTGLYSENFQSVLVKDDKELTNDS
                                                                                                                                                                                                                                                                                                                                                                                              EEFQDVYLVMELMDANLCQVIHM-----
                                                                                                                                                                                                                                                                                                                                                                                                                           KIYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNLVSNQYTLANEIEEKDIKLW 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ΥN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     424 amino acids
                                                                                                                                                                                                                                                      - VVTRYYRAPEVILGM-GYKENVDIWSVGCIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14.2%;
27.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US/09/025,580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                32:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VPI 97-104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 254.5; DB 4;
Pred. No. 5.1e-15;
19; Mismatches 112;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 424;
                                                                                                                                                                                                                                                        -GELVKGCVIFQGTD
                                                                                                                                                                                                                                                                                                                                                                                                 ----ELDHERMSYL 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                         229
                                                                                                                                                                                     278
                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                          248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16;
```

```
Qγ
                                                                                                                                                                                                                                                                                                      DЬ
                                                                                                                                                                                                                                                                                                                                        ρy
                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TOPOLOGY: linear; MOLECULE TYPE: protein US-09-025-580-27
                               Qy
                                                                         밁
                                                                                                           Qγ
                                                                                                                                                     В
                                                                                                                                                                                     Qy
                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 90; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (212) 596-909 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: TBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Germann, Ursula A.
TITLE OF INVENTION: Methods For Designing Inhibitors of
TITLE OF INVENTION: Serine/Thereonine Kinases and Tyros
NUMBER OF SEQUENCES: 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: Haley, James F.
REGISTRATION NUMBER: 27,794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 596-9000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 365 amino acids
                               290 FNLQKYPRKDWDIILPRCNDDLMKEIFTKMIRYDRSKRITSKEIL 334
                                                                                                               230
                                                                                                                                                       168
                                                                                                                                                                             174 DICYDLKLPPKDEPPMAKYIDVSTGIYKAPELIIGITNYEYEIDIWSLGII----LTGLY 229
                                                                                                                                                                                                                              118
                                                                                                                                                                                                                                                              114 VSNQYTLANEIEEKDIKLWLKSMSSGLEFIHSQGIIHRDIKPSNIFFARDDITQPIIGDF 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: 1251 AV
CITY: New York
STATE: NY
260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                          60 KPHPNII---EYF---NDLKIYDDVILVTKLYRYDLSQLIEITKYCKRTTRFIYGINGNL 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/09/025,580
                                                                                                                                                                                                                                                                                                      80 Q-HENVIGLLDVFTPASSLRNFYDFYLVMPFMQTDLQKI------ 117
                                                                                                                                                                                                                                                                                                                                                                              20 ELPKTYVSPTHVGSGAYGSVCSAIDKRSGEKVAIKKLSRPFQSEIFAKRAYRELLLLKHM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                      2 KLSDYYIDKELIYNSAISDIYTAIDKFNNLPVCLKIVDEDF--SLPPHSIHREIFILKTL 59
                                                                                                           SENFOSVLVKDDKELTNDSHVSDLYLLNQIFENFGTPNLTDFEDELFCDEVNNENLHFKK 289
                                                                                                                                                   ----DFGLARHADAEMTGY--VVTRWYRAPEVILSWMHYNQTVDIWSVGCIMAEMLTG--
QSLPQTPRKDFTQLFPRASPQ-AADLLEKMLELDVDKRLTAAQAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               amino acid
                                                                           --KTLFKGKDYLDQ
                                                                                                                                                                                                                              ---MGMEFSEEKIQYLVYQMLKGLKYIHSAGVVHRDLKPGNL-AVNEDCELKIL---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1251 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wilson, Keith Phillip
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fox, Ted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Su, Michael Shin-San
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (212)
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fish & Neave
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            596-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                           14.1%; score 252.5; DB 4; 26.1%; Pred. No. 6.3e-15; tive 57; Mismatches 125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VPI 97-104
                                                                               LTQILKVTGVPG-TEFVQKL----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels 73;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 365;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tyrosine Kinase
     303
                                                                                 NDKAAKSYI 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                          79
                                                                                                                                                                                                                                      167
                                                                                                                                                           219
```

14;

Search completed: May 29, 2002, 10:00:16 Job time: 290 sec

•	•	•		
		·		
			•	